Santa Clara Valley Water District's

Clean, Safe Creeks and Natural Flood Protection Program

A 15-year program to preserve and protect our quality of life

INDEPENDENT OVERSIGHT REPORT | FISCAL YEAR 2010-2011 | YEAR 10

Clean, Safe Creeks and Natural Flood Protection Program Independent Monitoring Committee

MESSAGE FROM THE CHAIR

January 2012

For the first time since its formation, the Independent Monitoring Committee (IMC) has serious concerns that one of the four major outcome areas of the Clean, Safe Creeks and Natural Flood Protection Plan (Plan) will not be achieved by 2016. In the November 2000 election, two-thirds of the voters passed the Plan, a 15-year "pay as you go" countywide special parcel tax, to fund Santa Clara Valley Water District (District) initiatives to protect homes and businesses from floods, add recreational trails, and safeguard creeks and ecosystems.

Additionally, the ballot measure created the IMC consisting of members appointed by the District's Board of Directors. Members were identified and appointed for their independence and willingness to speak candidly. As chair of the IMC, I greatly appreciate the service of the IMC members during the past year.

As members of the IMC, we take our voter-mandated task very seriously. It is clear that Santa Clara County voters view these projects as critical to our economy and quality of life. We carefully evaluate and report to the residents of Santa Clara County on the progress of the Plan, which is detailed in annual oversight reports.

Accordingly, this Fiscal Year 2010-2011 report details our findings on progress toward the Plan's four major outcome areas:

1. Homes, schools, businesses and transportation networks are protected from flooding.
2. There is clean, safe water in our creeks and bays.
3. Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the District Board of Directors.
4. There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate.

With this report, the IMC documents its serious concerns that major flood protection projects within Outcome 1 will not be achieved by 2016, the final year of the special parcel tax.

We hope you find this report helpful and informative and welcome your questions or comments. If you are as concerned as we are about the majority of the parcels planned for protection not proceeding on schedule, I urge you to contact me, the District's Board of Directors, and your state and federal representatives.

COMMITTEE MEMBERS

David Ginsborg
Chair

James Foran
Vice-Chair

Robert J. Baldini

Marc Berman

Jeffrey Cristina

Lonnie Gross

Nancy Hobbs

Marc Klemencic

Mark Lazzarini

Ed Rast

Charles Taylor

Terry Trumbull

Patrick J. Waite

Background

When the voters passed this measure in 2000, the historical practice had been that if a local jurisdiction taxed itself to pay for flood protection, the federal and state government would more than match those funds. The District had a successful track record of obtaining sufficient state and federal funds and anticipated this continued support for matching dollars to complete the flood protection projects outlined in Outcome 1 of the Plan.

Three of the nine flood protection projects — Upper Guadalupe River, Upper Berryessa Creek, and Upper Llagas Creek — depend upon state and federal funds to fully implement. Due to the prolonged economic downturn and government cutbacks, much of those anticipated funds have not materialized, putting some of the projects in jeopardy.

The Plan's overall flood protection program goal, assuming federal and state funding, was to protect an additional 15,976 parcels from flooding. Without state and federal funds, flood protection is reduced to 6,332 parcels.

Program Status

It is important to note that all of the Outcome 1 projects that are locally funded are proceeding on-schedule and on (or under) budget. In addition, other outcome objectives were sufficiently met or are adequately on target to meet both budgetary limitations and schedule deadlines.

In past reports, the IMC has strongly urged the District's Board of Directors to actively pursue state and federal funds and it has done so. However, despite substantial support from local officials and our congressional delegation, the availability of state and federal funds has significantly deteriorated since the inception of the Plan.

As a result of the decreased availability of state and federal funds, the Fiscal Year 2009-2010 IMC report noted that the estimated number of parcels protected by 2016 would be 9,491 with the remaining 6,485 parcels projected to be achieved at the earliest by 2019. The current estimate of parcels protected by 2016, even if federal funding is obtained, remains 9,491. Without federal funding, as noted above, the total parcels protected exclusively with local funding falls to an estimated 6,332 by 2016.

The IMC notes that the District's Board of Directors has taken the following actions to improve the potential for increased likelihood of Outcome 1 project completion:

- Directed staff to loan, as needed, up to $9.5 million from unallocated reserves from other outcomes to augment the capital project program. In doing so, the District has demonstrated its ongoing commitment to these projects and continues to work under the assumption that state and federal funds will be forthcoming.
- Temporarily delayed some of the environmental enhancement (Activity 3.2) and trail grant cycles (Activity 4.1). In both of these activities, the primary objectives are on track to be satisfied by 2016. The Board has committed to a framework that reimburses these activities in the future as federal and state funds become available to complete these Outcomes.
- The Board also determined it could use program management and support funds (Activity 1.3) for support of the capital project program. The same reimbursement framework would also apply.

Moving Forward

The outlook for the availability of state and federal funds remains highly uncertain. The IMC believes it would be a tremendous loss for the District to expend all of the Plan's Outcome 1 funds for planning and land acquisition and then be unable to proceed with providing flood protection for over 9,000 parcels for the foreseeable future. Therefore, the IMC strongly recommends that the District's Board of Directors:

- Continue its aggressive pursuit of state and federal funds;
- Continue, on a regular basis, to consider all measures to maximize the number of parcels protected by 2016;
- Explore other options for changing or reprioritizing Outcome 1 projects in the event that outside funding remains uncertain; and
- Expend unallocated funds in Outcomes 2, 3, and 4 for their intended purposes by 2016.

The status for all outcomes is summarized in the following pages and is described more fully within the report. For some outcomes, the IMC has made suggestions and recommendations to the Board for consideration.

The IMC would like to acknowledge the District's responsiveness to our concerns. Specifically, the IMC appreciates the District's willingness to address the funding shortfall and its impact on the flood protection program. In addition, the IMC commends the District for agreeing to the IMC 2010 recommendation to perform an independent Performance and Management Audit (Audit) of the Plan. As of December 2011, a year after to which the IMC's recommendation had been agreed, the District was just beginning the process to select an auditor. We urge the District to proceed with this Audit as quickly as possible.

For more information, please go to the District's website at ***www.valleywater.org*** or contact me directly at ***imc@valleywater.org***.

Sincerely,

David Ginsborg
Chair

SUMMARY OF PROGRAM STATUS

1. Homes, schools, businesses and transportation networks are protected from flooding.

- The Calabazas Flood Protection Project completed the first year of construction in Fiscal Year 2010-2011. This project is scheduled to complete construction by October 2011. This project will protect 2,483 parcels.
- Permanente Creek is currently scheduled to begin construction in September 2012. This project will protect 2,220 parcels.
- Work continues on the Upper Guadalupe River, Upper Berryessa Creek, and Upper Llagas Creek flood protection projects, however, due to uncertainty and delays in federal funding, the schedule for the Upper Guadalupe River flood protection project has been delayed to 2019.
- The goal of the sediment removal project is to maintain at least 90% of improved channels at design capacity. The Program pays for the removal of 8,000 cubic yards or 10 percent of the District average sediment removal from channels. With Program funds, the District has removed 58,988 cubic yards program-to-date. The IMC is satisfied that the sediment removed using Program funds helped maintain the water carrying capacity of flood channels, even though the amount of sediment removal was less than the originally estimated annual target of 8,000 cubic yards. The amount of sediment needing to be removed is dependent upon the severity of winter storms.
- The District set aside $496,000 in Fiscal Year 2010-2011 for future creek maintenance. At the end of Fiscal Year 2010-2011, the total reserve fund for future creek maintenance is $4,356,000. With continuous contributions at the same level through 2016, the reserve fund will support the Program activities until 2029, when the fund runs out.

2. There is clean, safe water in our creeks and bays.

- The District is meeting its commitment to reduce pollutants from urban runoff in the Uvas/Llagas watersheds by providing assistance to south county cities for implementation of pollution prevention measures.
- The District met its commitment, 100% percent of the time, to respond within 2 hours to hazardous material requests in the Uvas/Llagas watersheds.
- The District is meeting its commitment to improve impaired water bodies
- The District met its obligation of conducting 4 major cleanup events and met its 5-day response goal.
- The District fulfilled its promise to the voters to achieve reductions of pollutants in surface water in Fiscal Year 2010-2011 through continued partnerships with the Santa Clara County's Green Business Program, the Santa Clara Valley Urban Runoff Pollution Prevention Program and a new partnership with the City of San José.

3. Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Santa Clara Valley Water District Board of Directors.

- The District exceeded the annual goal of managing 1,466 acres of vegetation. Cumulatively the District has managed 15,240 acres, exceeding the target-to-date of 13,199 acres. The amount of vegetation as currently managed will exceed the fifteen-year, 22,000 acre Program goal.

- The District has exceeded the Program goal of 100 acres of environmental restoration through both the planning and implementation of environmental enhancement grant projects. For Fiscal Year 2010-2011, grants were used as a means of reaching out to the community and encouraging innovative ideas. These grants included the Environmental Enhancement Grant funded by Outcome 3, as well as the Trail and Open Space Grant and Watershed Stewardship Grant funded by other portions of the Program. These grants allowed the District to reach out to non-profits, agencies, and schools. The success of this approach was evident in the number of proposals received, e.g., the Environmental Enhancement Grant alone received ten quality proposals. Refer to Activity 3.2 in the full report for additional details, including a list of approved projects.

4. There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate.

- The trails program has achieved 65.5 miles of trails and is poised to attain the Program's goal of 70 miles of trails and open space by or before 2016.

Outcome 1

Homes, schools, businesses and transportation networks are protected from flooding

Outcome 1 of the Clean, Safe Creeks and Natural Flood Protection Program (Program) is designed to protect homes, schools, businesses and transportation networks from flooding.

The Program includes nine new flood protection projects. The flood protection goal for the nine projects is 15,976 parcels protected from flooding. The ballot measure did provide a range of 5,876 parcels protected, if state and federal funds are not received, to 15,976 if state and federal funding is received. Vital transportation networks (220 miles of streets and highways in all) will also be protected by these projects.

These projects are being developed to provide as many benefits as possible beyond flood protection including ecosystem restoration, water quality improvement, aesthetic enhancement, and recreational opportunities. A table at the end of Section 1.1 identifies each project's benefits toward Outcome 2, 3, or 4 objectives. Such benefits are usually identified as a project moves from the planning to the design and/or construction phases.

In addition to the nine capital projects, the activities in Outcome 1 include sediment removal from creeks to preserve flood flow capacity, and maintenance activities for the nine new flood protection projects once they are completed. These activities will help to ensure that channels, both improved and unimproved, can convey floodwaters during high flow events.

Statewide, capital project construction bids continue to be very competitive, and are often well below engineers' estimates, due to the worldwide recession. It is not known how long these more favorable conditions for project construction will prevail. The District continues to progress projects towards construction; some cost savings may be realized if the current market conditions are sustained for the next several years.

The trend in construction costs for Program projects is subject to ongoing analysis by the District for review by the Independent Monitoring Committee.

Activity 1.1

Provide flood damage reduction by increasing the stream's ability to convey the 100-year flow.

Fifteen-Year Goal

Protect 15,976 parcels through the completion of up to nine new flood protection projects. These protective activities include seven construction projects, one planning/design/partial construction project, and one planning/design project. Three of the seven construction projects are dependent on federal funding for completion of flood improvements; the current estimate of targeted parcels, with federal funding, is 9,491 parcels to be protected by 2016. This reflects the delay and uncertainty in the availability of state and federal funds, compared to what was anticipated in 2000.

In the original Program Plan, the total project cost for all nine projects was $328.4 million, of which the federal contribution was anticipated to be $83.7 million, or 25.5% of the total project cost. Although reduced federal funding may delay completion of three of the Program's projects, the District will continue to pursue these funds after the Program's sunset in 2016.

Currently, the total projected Program funding for all of these capital projects is $371.7 million while the total estimated cost to construct all projects is $688.4 million including all other sources of revenue.

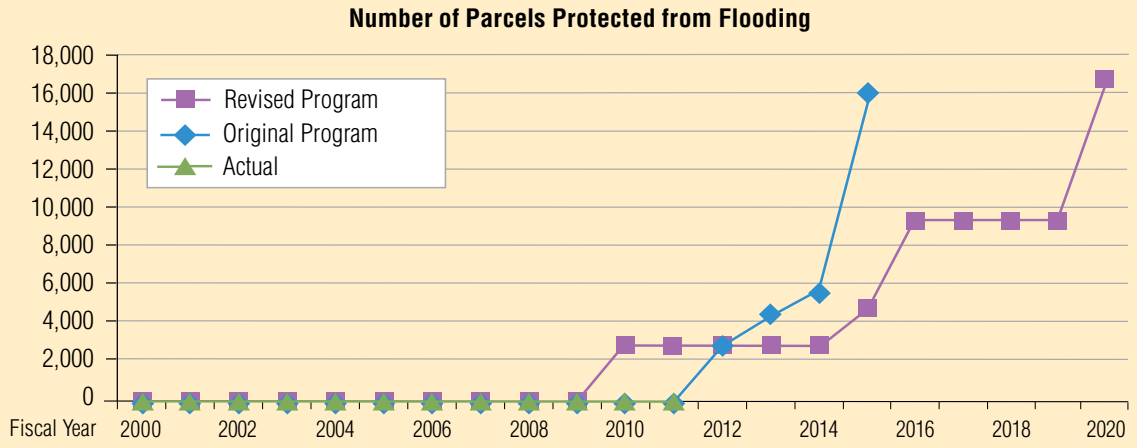
How This Activity Will Be Measured

This activity will be measured by yearly progress of parcels protected in comparison to the Program schedule that was submitted to the voters. Additionally, the amount of funding expended for each project will be tracked annually.

Committee Assessment/Recommendation of this Activity

Most of the capital projects are on schedule, and construction was initiated for the Upper Guadalupe River Reach 6 work in spring 2010; construction for the Calabazas Creek project and the Permanente Creek project is anticipated to begin in summer of 2010 and summer of 2011, respectively.

15-year Program Graph



The Independent Monitoring Committee (Committee) monitors the challenges to the schedule that shortfalls in the U.S. Army Corps of Engineers (Corps) and State Flood Control Subventions Program funding are causing. Congressional appropriations for the Corps' projects have all been below anticipated funding levels in recent years. The Llagas Creek project continues to be at risk due to a 2005 reevaluation of its benefit/cost ratio by the Corps, which was determined to be less than 1.0. The District has moved forward on construction work in Fiscal Year 2010-2011, but no project has yet been completed to fulfill its promise to the voters on this activity for Fiscal Year 2010-2011.

While completion of all projects by 2016 is subject to federal and state funding, all projects are anticipated to have completed all planning, environmental, and design work.

Committee Recommendation

The Committee urges the District to explore ways to further accelerate procurement of federal funds and/or aggressively pursue funding alternatives to achieve the goals of Outcome 1 relative to parcel protection. The Committee also supports the District's watershed-wide approach for project alternative evaluations, which includes working with cities to preserve pervious areas.

Finally, the Committee strongly recommends:

- Continue its aggressive pursuit of state and federal funds;
- Continue, on a regular basis, to consider all measures to maximize the number of parcels protected by 2016;
- Explore other options for changing or reprioritizing Outcome 1 projects in the event that outside funding remains uncertain; and
- Expend unallocated funds in Outcomes 2, 3, and 4 for their intended purposes by 2016.

Federal and State Funding

For projects that are federally funded, the Corps performs the planning, design, and construction, while the local sponsor, i.e., District, obtains all the rights-of-way, utility relocations, and any hazardous material clean-ups that are required. The District work is eligible for 70% reimbursement from the state on all Corps projects. This reimbursement is known as state subventions and provides additional dollars to these federal projects. Therefore, working with the Corps has the benefit of creating another source of funding to these large projects.

MEASURE

What is being measured?

Number of parcels that have flood damage reduction upon completion of flood protection projects as planned in the Program.

Target

The original flood damage reduction target was 15,976 parcels by 2016, assuming state and federal funding, and 5,876 parcels if state and federal funds are not received. However, due to delays and uncertainty from lack of federal funding, the current flood damage reduction target is 9,491 parcels by 2016.

Challenges to Intended Outcome

Challenges to the 15-year Program include the ability to secure federal funding and state subvention reimbursements, the costs of labor (internal and external to the District), and changes in environmental regulations and restrictions. Due to the current recession, capital project construction bids have been very competitive and are often well below the engineers' estimates. It is not known how long this condition will be sustained.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

Although construction began on the Upper Guadalupe River project this year, no parcels received flood damage reduction in Fiscal Year 2010-2011.

During this tenth year, the Program funded planning, design, and/or construction work on eight of the nine identified capital projects. The status of each of the nine projects and the amount spent in Fiscal Year 2010-2011 (in parentheses) are as follows:

Permanente Creek: In February 2010, the Board of Directors awarded a consultant design contract for $4.3 M for the design of the four off-stream storage detention basins that have been proposed for the project. The consultant has completed the preliminary design work and began 30% design of the Rancho San Antonio detention basin.

The Board of Directors certified the Final Environmental Impact Report (EIR) for the project in June 2010. On February 22, 2011, the Board approved an environmental contract amendment to the Jones & Stokes consultant agreement to prepare a subsequent EIR for the project to evaluate project modifications post EIR certification. Staff has completed the in-house design for floodwalls and channel improvements. ($1.9 million expended in Fiscal Year 2010-2011)

San Francisquito Creek: In Fiscal Year 2010-2011 the District requested $1 million in federal funding for this project, however, received no funding. The Corps has completed an existing conditions hydraulics analysis, a geotechnical and reliability analysis of downstream floodwalls and levees, and a sediment transport study for the creek. The District's consultant has completed a hazardous materials investigation, and cultural resources investigations. The Corps has tentatively scheduled a Feasibility Scoping Meeting for September 2011.

The San Francisquito Creek Joint Powers Authority (JPA) has retained consultants to complete the design and environmental documentation for an early implementation project (Downstream of Hwy 101). The consultant has completed 30% design documents.

District staff and the JPA have developed a range of conceptual alternatives for the project upstream of Highway 101. District staff has completed preliminary design for a staff recommended alternative. All expenditures to date for this project have been charged to the District's Watershed and Stream Stewardship Fund. ($0 expended in Fiscal Year 2010-2011)

Sunnyvale East Channel and Sunnyvale West Channel: The staff-recommended alternative was identified and presented to the Board of Directors for consideration in August 2010. Additional biological and water quality studies have been conducted. The 30% design commenced. ($1,039,000 expended in Fiscal Year 2010-2011)

Calabazas Creek: Staff completed the design of flood protection elements and acquired all necessary permits for construction. The flood protection elements of the project were advertised for construction bids in late May 2010; construction work began in late summer 2010, and will be completed by October 2011. The final phase of a 3-year phase of eroded bank repair is scheduled to be completed in September 2011. ($1.1 million expended in Fiscal Year 2010-2011)

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Upper Guadalupe River: In Fiscal Year 2010-2011 the Corps requested $12.5 million in federal funding for construction of Reach 10B and design and construction of Reach 12; however, they received $3.3 million to continue working on the redesign and construction of Reach 10B and no funding for Reach 12. The Corps, in coordination with the District, completed the construction of Reach 10B (Almaden Expressway to Gage Station 23B, downstream of Koch Lane) in January 2010. Heavy storms in October 2009 and January 2010 caused erosion in various locations along the project alignment. The Corps is finalizing design options with the San Francisco Bay Regional Water Quality Control Board to address the eroded areas in summer 2012. Lack of federal funds has prevented the Corps from completing the design of improvements in Reach 12 and beginning construction of Reach 12 in June 2012. At the District Board meeting on March 22, 2011, the Board approved the transfer of $9.5 million from the Clean, Safe Creek unallocated reserves to complete the design and begin construction of Reach 12 in June 2012. District staff is working with the Corps staff on how this additional District fund can be credited as part of the District's share of the federal Upper Guadalupe River Flood Protection Project in future years. Lack of federal funds continues to delay completion of Reaches 7 to 12. The entire Upper Guadalupe River Project may be completed in 2019, pending availability of federal funds. The original scheduled was to complete the project in 2016. The District began construction of Reach 6 (from I-280 to the SPRR Bridge downstream of Willow Street) in May 2010, and construction of Reach 6 is anticipated to be complete in May 2012. Two commercial properties, containing 8 parcels and one easement have been acquired this year. ($13.7 million was expended in Fiscal Year 2010-2011)

Berryessa Creek: In Fiscal Year 2010-2011, the Corps requested $500,000; however, they received only $45,000. District staff continues to support the Corps in their efforts to complete the General Reevaluation Report (GRR) and the Environmental Impact Report/Statement (EIR/S) for this project. The Corps is performing an economic analysis to determine the National Economic Development (NED) plan. An amendment to increase the District's and Corps shares by $1.4 M was approved by the District and Corps in November 2010. Staff has been coordinating with the Corps to ensure that the local project objectives are met. ($923,000 expended in Fiscal Year 2010-2011)

Coyote Creek: Based on input received from the community on the conceptual alternatives for flood protection along Coyote Creek, the project team has evaluated the options of modifying reservoirs and creating new off-stream detention basins in the upper watershed to minimize channel improvements in the project reaches in Coyote Creek. The results show that all the options considered will cost more than $500 million. Due to the limited funding from the Clean, Safe Creeks and Natural Flood Protection Program, staff has concentrated its effort on the downstream reaches work that can be supported within the Clean, Safe Creeks and Natural Flood Protection Program budget. Current schedule is to start design in summer of 2012 and construction in summer of 2013 in the reaches between Montague Expressway and I-880. Staff has also started downstream survey work for hydraulic analysis verification. Work continues on the annual geomorphic cross sectional surveys and on a fourth year of a fishery study. Staff is continuing coordination with the City of San José and other stakeholder groups in feasible alternatives' development. ($678,000 expended in Fiscal Year 2010-2011)

Upper Llagas Creek: In Fiscal Year 2010-2011, the District requested $2 million in federal funding, however, only received $50,000 in reprogramming funds. The District and the City of Morgan Hill entered into a cost-sharing agreement (in 2009) to fund project design using local monies, as the Corps has not been receiving adequate funding to progress the design. A $6.5 million consultant design contract was approved by the Board in May 2010 and the design work is underway. Geotechnical Investigation and surveys have been conducted to undertake the 30% designs. As federal funding has been inadequate and the Corps was not able to progress the environmental documentation the District commenced negotiations to take over the Corps' EIR/S consultant contract. ($2,131,000 expended in Fiscal Year 2010-2011)

Current project schedules, maps of Program projects, and detailed information about Program projects are shown on pages 9 through 26.

Trend and Explanation

There are nine flood management projects in the Program: Permanente Creek (1,664 parcels), Sunnyvale West Channel (11 parcels), Calabazas Creek (2,483 parcels), Sunnyvale East Channel (1,618 parcels), Upper Guadalupe River (6,989 parcels), Berryessa Creek (1,662 parcels), Upper Llagas Creek (1,397 parcels), Coyote Creek (planning/design/partial construction) and San Francisquito Creek (planning/design only). The federally-sponsored projects are Upper Guadalupe River (Reaches 7-12), Berryessa Creek, and Upper Llagas Creek.

The 15-year target performance line indicates the number of parcels that will be removed from the floodplain upon scheduled completion of each capital project.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

The 16,000 parcels slated for protection in Program year fifteen is the result of the expected culmination of multiple years of construction. If funding from all three federally-sponsored projects is not received in time, the targeted outcome will be reduced to 5,876 parcels. Depending on the project, this threshold of impact occurs between Fiscal Year 2012 and 2014. The Upper Guadalupe River Flood Protection Project is scheduled for completion in 2019 beyond the original schedule to complete this project at the completion of the 15-year Program in 2016.

The Independent Monitoring Committee and District staff will closely monitor the trend. Where possible, projects will be completed ahead of schedule.

Financial Consideration

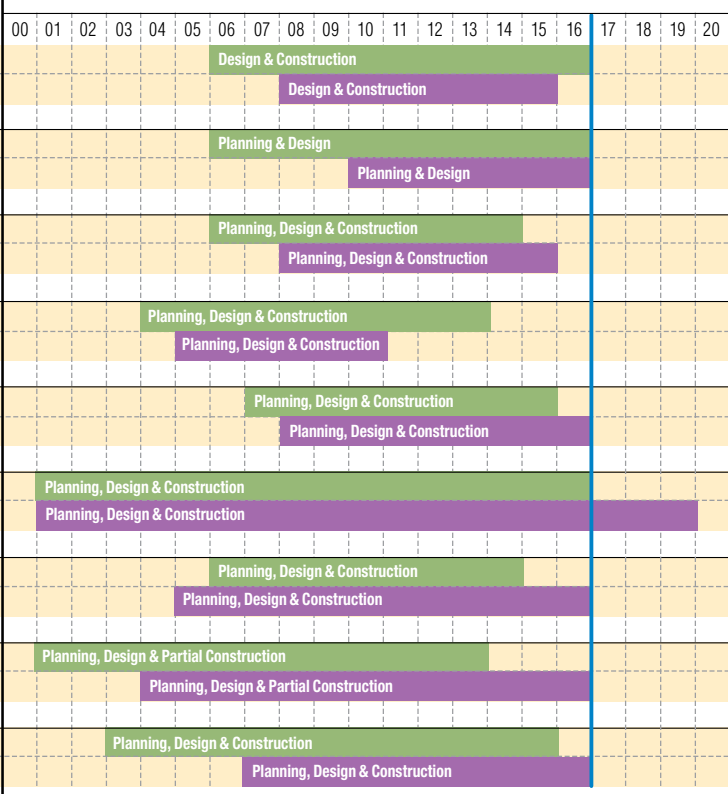
Projected estimated annual allocation (inflated) for this activity was $23.9 million for Fiscal Year 2010-2011. The total amount spent in Fiscal Year 2010-2011 was $21.5 million and the amount appropriated to reserves as planned was $2.4 million. For detailed financial information, please see Appendix pages A4 and A5.

Capital Program Schedule

Clean, Safe Creeks and Natural Flood Protection Program

Outcome 1: Capital Projects Schedule and Parcels Protected

	Capital Project	Schedule	Parcels Protected by 2016	
			Original Program Goal	Revised Program Goal
1	**Permanente Creek** (SF Bay to Foothill Expwy[2])	Original	1,664	
		Current		2,220[3]
2	**San Francisquito Creek**[1] (SF Bay to Searsville dam)	Original	0	
		Current		100
3	**Sunnyvale West Channel** (Guadalupe Slough to Hwy 101)	Original	11	
		Current		11
4	**Calabazas Creek** (Miller Avenue to Wardell Road)	Original	2,483	
		Current		2,483
5	**Sunnyvale East Channel** (Guadalupe Slough to I-280)	Original	1,618	
		Current		1,618
6	**Upper Guadalupe River**[1] (I-280 to Blossom Hill Road)	Original	6,989	
		Current		0[5]
7	**Berryessa Creek**[1] (Calaveras to Interstate 680)	Original	1,814	
		Current		1,662[4]
8	**Coyote Creek** (Montague to Hwy 280)	Original	0	
		Current		0
9	**Upper Llagas Creek**[1] (Buena Vista to Wright Avenue)	Original	1,397	
		Current		1,397
		Total	**15,976**	**9,491**



2000 project schedule
2011 project schedule

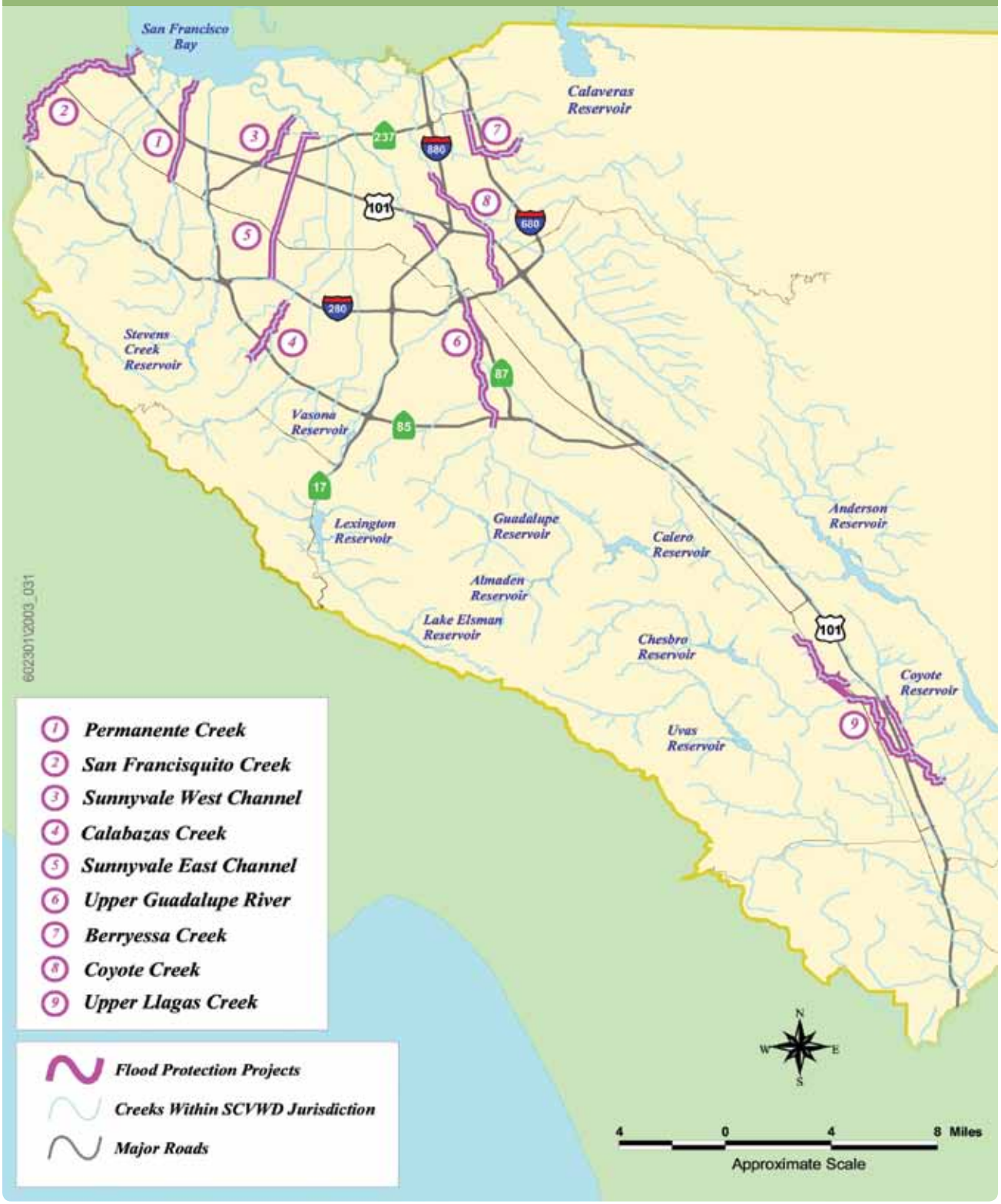
Notes:

1 U.S. Corps of Engineers Partner Project
2 Construction planned only to El Camino Real
3 Permanente Creek Project — upstream detention basins increased protected parcels
4 Berryessa Creek Project — Parcel change based on Corps' re-evaluation of project study area and cost/benefit ratio
5 Upper Guadalupe River Project — Flood protection cannot be achieved until completion of the entire project in 2019. On March 22, 2011, the Board approved a transfer of $9.5 million from the Program funds to complete the design and begin construction of Reach 12 in June 2012. The intent of the advancement of District fund is to minimize delays to the completion of the project. Pending available federal funds, the entire project is expected to be completed in 2019.

If federal funding is delayed for an extended period of time on any of the federal cost share projects, environmental documents may become obsolete and require revision.

Construction shown does not include landscape establishment period of 3 years.

Clean, Safe Creeks and Natural Flood Protection Program Flood Protection Projects



Permanente Creek Flood Protection Project

The Permanente Creek watershed encompasses 28 square miles, including portions of the cities of Los Altos, Mountain View, Cupertino, Los Altos Hills, and Palo Alto.

Objectives and Benefits

- Provide flood protection, reduce erosion and sedimentation from the San Francisco Bay to El Camino Real
- Protect 1,664 parcels from 100-year flooding.
- Address the deterioration of aging facilities.
- The potential for trails will be addressed in the project planning study.

Program Allocation and Project Cost

Total anticipated allocation:	$38.6 million ($27.4 million in 1999 dollars escalated at 3% per year)*
Current estimated project cost:	$35 - $40 million
Program funds spent to date:	$3.7 million ($1.6 million in Fiscal Year 2010-2011)

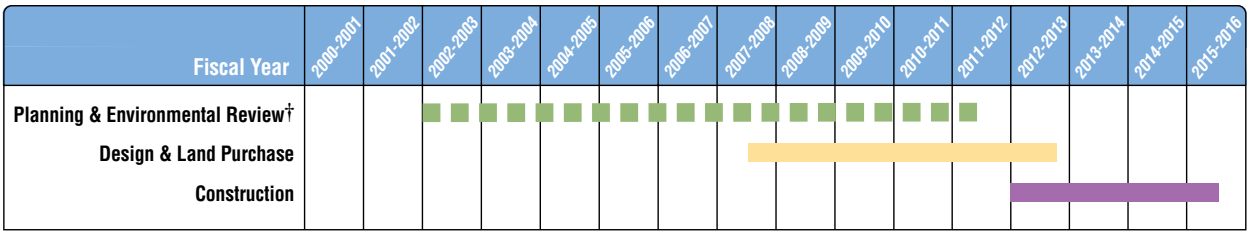
Initiation and Completion Dates (Program)

October 2008 to June 2016 (Finalize design documents and construct).

Fiscal Year 2010-2011 Project Status

- The proposed project, if fully implemented, will protect 2,220 parcels from the 100-year flood. The increased number of parcels protected is due to detention basins being included in the preferred (selected) project alternative.
- The Final Environmental Impact Report (EIR) for the proposed project was certified by the Board in June 2010. A subsequent EIR is being prepared to evaluate project modifications post EIR certification.
- The proposed project was updated to incorporate the new project constraints.
- The in-house design for floodwalls and channel improvements was completed.
- The design of the flood detentions basins commenced in January 2009.
- No change in planned completion date.

Current Schedule



† *The planning and initial design are currently underway. Negotiations to acquire real properties for flood detention basins are planned to begin in fiscal year 2011.*

* *To account for inflation, expenditures were escalated at a rate of 3% per year in the cash-flow analysis that was used to prepare the July 2000 Program report and subsequent election documents. As discussed on page 3 of this report, construction costs have been fluctuating from year to year and staff will continue to monitor and develop strategies to successfully complete the District's commitment to the voters for this Program.*

PERMANENTE CREEK

LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Proposed Project Elements:

- Floodwall construction from HWY 101 to Charleston Road
- Flood-proof wall between Charleston Road and Amphitheater Parkway
- Levee construction downstream of Amphitheater Parkway
- Replacing the aging concrete channel between Mountain View Ave and Arroyo Drive with a new concrete channel
- Off-stream flood detention basins at Rancho San Antonio, McKelvey Park off Miramonte Avenue, and Cuesta Park Annex off Cuesta Drive
- Upgrade Stevens Creek Diversion Structure
- Trails opportunities between HWY 101 and Middlefield Road has been presented to the Board for consideration

Permanente Creek erosion and debris.

San Francisquito Creek Flood Protection Project

(Planning and design only)

San Francisquito Creek is one of the last continuous riparian corridors on the San Francisco Peninsula, and is also home to one of the few remaining viable steelhead trout runs. The creek runs along the border between San Mateo and Santa Clara counties and flows through five cities, from Searsville Lake above Stanford University to the San Francisco Bay near the Palo Alto Airport.

Objectives and Benefits

- Provide planning and design (not construction) in cooperation with the San Francisquito Creek Joint Powers Authority (JPA) for flood protection and erosion/sedimentation control on San Francisquito Creek from San Francisco Bay to Searsville Dam.
- The riparian habitats and urban setting offer unique opportunities for a multi-objective project that could enhance habitat, improve water quality and provide for recreational use.

Program Allocation and Project Cost

Total anticipated allocation:	$10.6 million ($8 million in 1999 dollars escalated at 3% per year)
Current estimated project cost:	Planning/Design not to exceed $10.6 million
Program funds spent to date:	$0

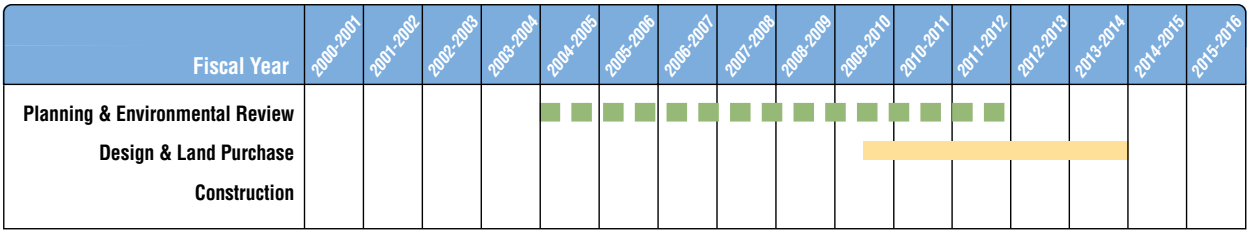
Initiation and Completion Dates

- Complete Planning Phase – July 2008 to June 2012
- Finalize design documents only – July 2010 to June 2014
- Complete Planning and design for the early implementation project work downstream of Highway 101 – July 2009 to July 2012

Fiscal Year 2010-2011 Project Status

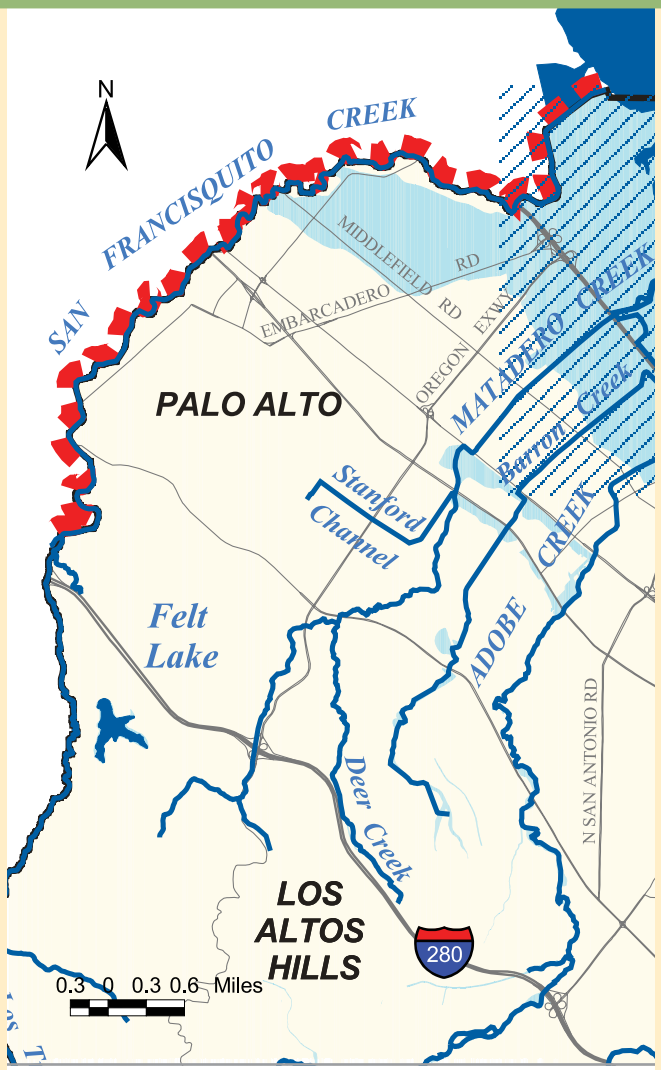
- The District's consultant has completed the cultural resources investigations.
- The Corps has completed draft Environmental Setting Report.
- The JPA consultant has prepared 30% plans for early implementation project from Hwy 101 downstream to San Francisco Bay that will protect approximately 100 parcels.
- District staff has developed a preliminary plan for floodwall/channel widening alternative for the project upstream of Highway 101.
- Caltrans has begun the design of HWY 101 Bridge crossing replacement.
- The City of Palo Alto has received a grant for design and replacement of Newell Bridge.

Current Schedule



Lower Peninsula Watershed Fund and other members of the San Francisquito Creek Joint Powers Authority. Project design delayed five years from original schedule due to inconsistent Congressional funding in support of federal partner, U.S. Army Corps of Engineers.

SAN FRANCISQUITO CREEK



LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Project Alternatives to be Evaluated Will Include:

- Raising levees downstream of Highway 101
- Off-stream storage for peak flood flows in upper watershed
- Bypass channel from University Avenue to Highway 101
- Flood wall construction upstream of Highway 101
- Replacing Newell Road, University Avenue, Pope Chaucer Street, and Middlefield Road bridges

In February 1998, San Francisquito Creek overflowed its banks causing over $28 million in damages.

Sunnyvale West Channel Flood Protection Project

This project upgrades the circa 1960 Sunnyvale West outfall to protect against a 100-year flood. Besides protecting an important commercial and industrial area in Sunnyvale, the project also reduces erosion, sediment and subsidence problems.

Objectives and Benefits

- Increase the level of flood protection provided on Sunnyvale West Channel from Guadalupe Slough to Highway 101.
- Protect 11 parcels (covering approximately 47 acres) from 100-year flooding.

Program Allocation and Project Cost

Total anticipated allocation:	$7 million ($5.1 million in 1999 dollars escalated at 3% per year)
Current estimated project cost:	(see report for Sunnyvale East Channel).
Program funds spent to date:	(see report for Sunnyvale East Channel).

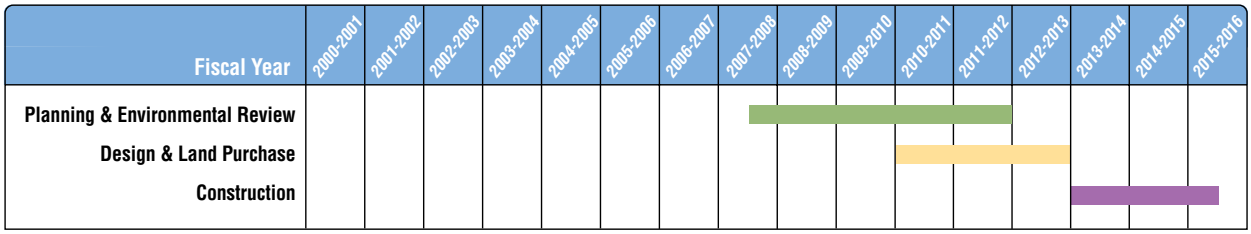
Initiation and Completion Dates

July 2005 to December 2015.

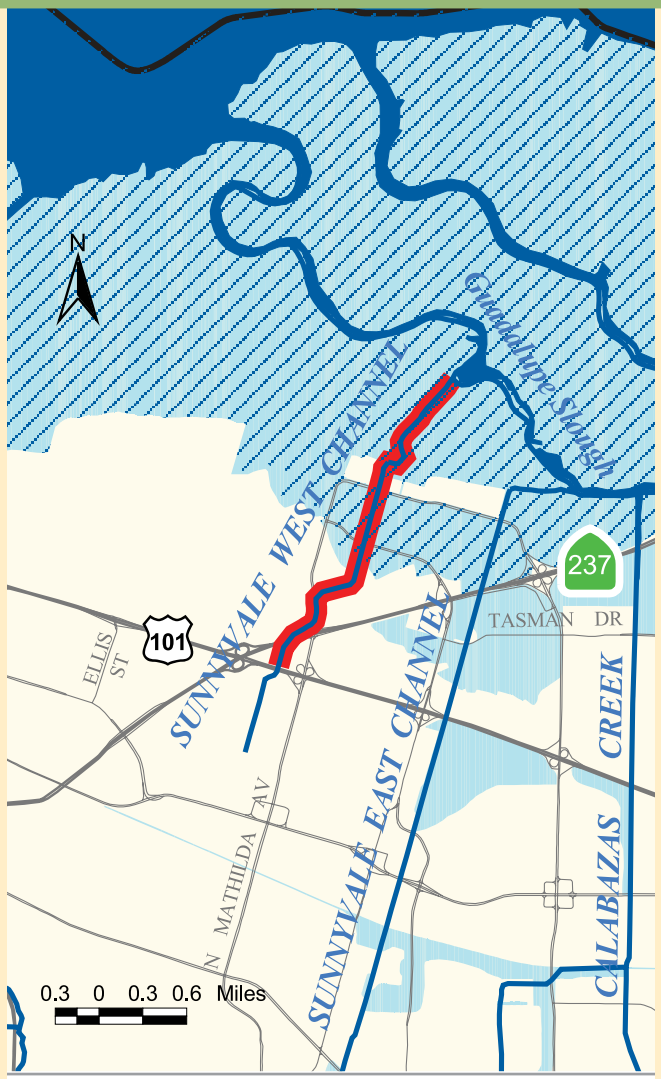
Fiscal Year 2010-2011 Project Status

- To increase cost effectiveness, both Sunnyvale West and East Channels' Planning and Environmental Review phases are being combined, which extends the Planning and Environmental Review phase of Sunnyvale West Channel. Both projects are currently on track to be completed by the end of the 15-year Program.
- Planning Study Report was approved by the Board on August 31, 2010.
- Project moved into the design phase in Fiscal Year 2010-2011.
- Additional water quality and habitat studies completed.
- The 30% design documents have commenced.
- No change in planned completion date

Current Schedule



SUNNYVALE WEST CHANNEL



LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Proposed Project Elements:

- Construction of floodwalls
- Raising levees with earth fill
- Construction of new culverts at Hetch-Hetchy pipeline crossing
- Erosion protection measures to improve water quality

Sunnyvale West Channel

Calabazas Creek Flood Protection Project

Calabazas Creek extends approximately 13.3 miles from the confluence with Guadalupe Slough to the Saratoga foothills. This project completes flood protection in the Calabazas Creek watershed, which drains approximately 21 square miles within the cities of Sunnyvale, Cupertino, San José, Santa Clara, and Saratoga.

Objectives and Benefits

- Provide flood protection on Calabazas Creek from Miller Avenue to Wardell Road.
- Protect 2,483 parcels from 100-year flooding.
- Provide erosion protection measures to improve stream quality.
- Identify environmental restoration and enhancement and recreational enhancements, where opportunities exist.

Program Allocation and Project Cost

Total anticipated allocation:	$49.3 million ($35.1 million in 1999 dollars escalated at 3% per year)
Current estimated project cost:	$11 - $12 million
Program funds spent to date:	$9.4 million ($1.1 million in Fiscal Year 2010-2011)

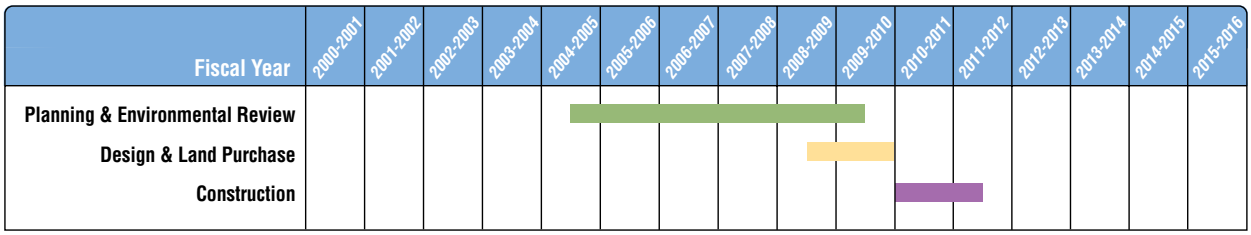
Initiation and Completion Dates

July 2003 to June 2013.

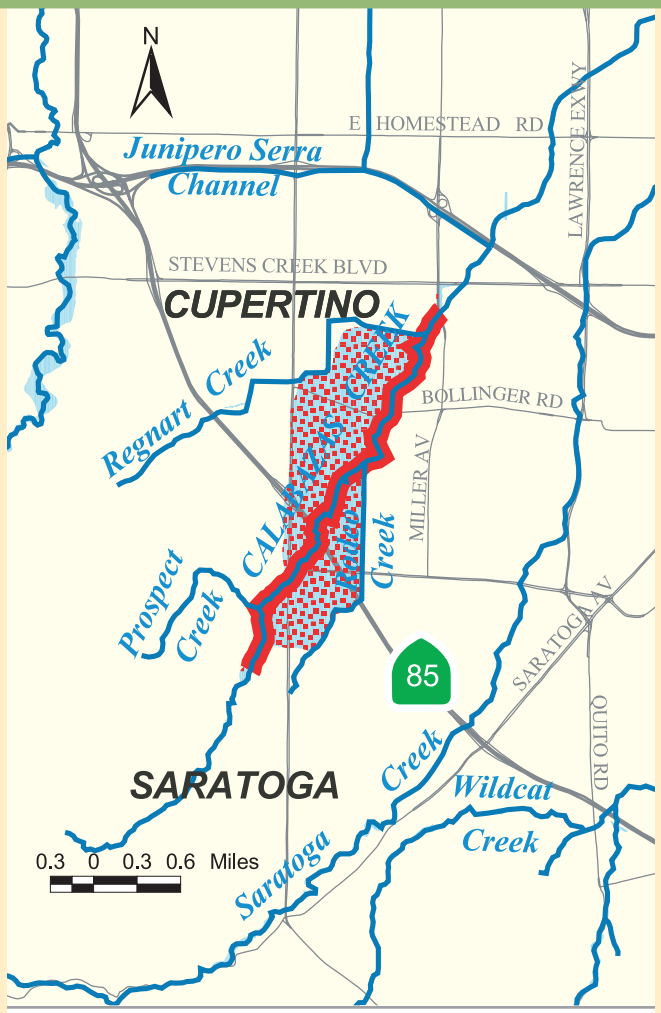
Fiscal Year 2010-2011 Project Status

- Board awarded the construction contract to R.M. Harris Company, Inc. in the sum of $1,529,235 on July 3, 2010.
- Construction of flood protection elements began in summer 2010 and will be completed by October 2011.
- Completed first section of the box culver under Saratoga-Sunnyvale Road and the sidewalk.
- Completed the detention basin construction along the south western side of Calabazas Creek.
- Completed approximately 90% of the mitigation planting.
- Completed the second year of a 3-year bank erosion protection effort as part of the flood protection project.

Current Schedule



CALABAZAS CREEK



LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Project Elements Implemented:

- Replacement of Bollinger Road Bridge

Proposed Project Elements:

- Modification/replacement/upgrade of box culverts at Saratoga-Sunnyvale Road, and Union Pacific Railroad (UPRR) crossing

Calabazas Creek overtops its banks flooding neighborhood streets.

Sunnyvale East Channel Flood Protection Project

This project upgrades the circa 1960 Sunnyvale East outfall to protect against a 100-year flood.

Objectives and Benefits

- Provide flood protection on Sunnyvale East Channel from Guadalupe Slough to Interstate 280.
- Protect 1,618 parcels from 100-year flooding.
- Erosion reduction measures to improve stream water quality.

Program Allocation and Project Cost

Total anticipated allocation:	$36.9 million ($24.1 million in 1999 dollars escalated at 3% per year)
Current estimated project cost:	$90 million
Program funds spent to date:	$6.3 million ($1,067,000 in Fiscal Year 2010-2011)

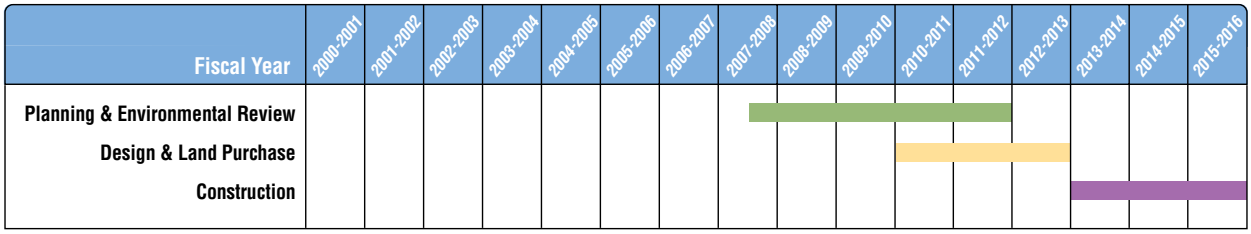
Initiation and Completion Dates

July 2006 to June 2016.

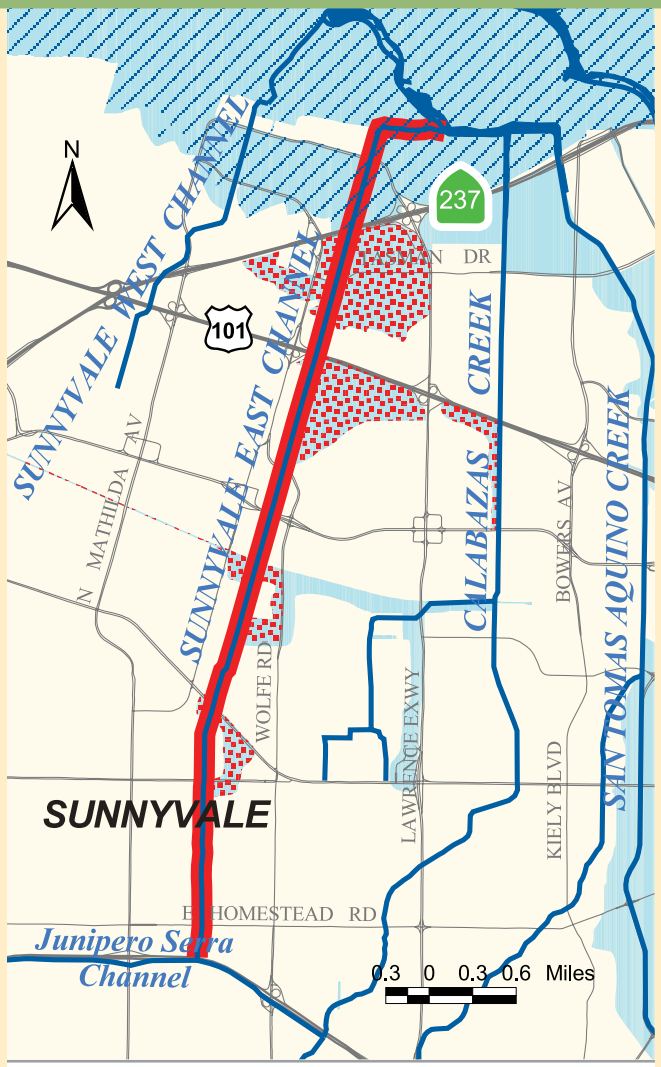
Fiscal Year 2010-2011 Project Status

- Planning Study Report was approved by the Board on August 31, 2010.
- Project moved into the design phase in FY 2010-2011.
- Additional water quality and habitat studies completed.
- 30% design documents have commenced.
- No change in planned completion date.

Current Schedule



SUNNYVALE EAST CHANNEL



LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Proposed Project Elements:

- Channel widening and raising of existing earth levees
- Construction of floodwalls upstream of Highway 237
- Erosion protection measures to improve water quality
- Replace Caribbean Drive Bridge

Sunnyvale East Channel flooding in 1983.

Upper Guadalupe River Flood Protection Project

This project provides protection for some of the oldest residential areas in San José, as well as commercial areas in Willow Glen and vital transportation networks.

Objectives and Benefits

- Provide flood protection on Guadalupe River from Highway 101 to Interstate 880 (Reach A) and from Interstate 280 to Blossom Hill Road.
- Reduce flooding potential to Highway 87 and the adjacent light-rail line.
- Protect 6,989 parcels from 100-year flooding.
- Provide long term beneficial impacts to stream ecology, hydrology, wildlife, and fisheries.
- Reduce erosion and increase water quality and allow for continuous creekside trail access.

Program Allocation and Project Cost

Total anticipated allocation:	$98.7 million ($70.8 million in 1999 dollars escalated at 3% per year)
Current estimated project cost:	The Corps' current project cost estimate is $272.5 million, with a federal share of $136.7 million and a total District, state, and local share of $135.8 million.
Program funds spent to date:	$61.5 million ($13.7 million in Fiscal Year 2010-2011)

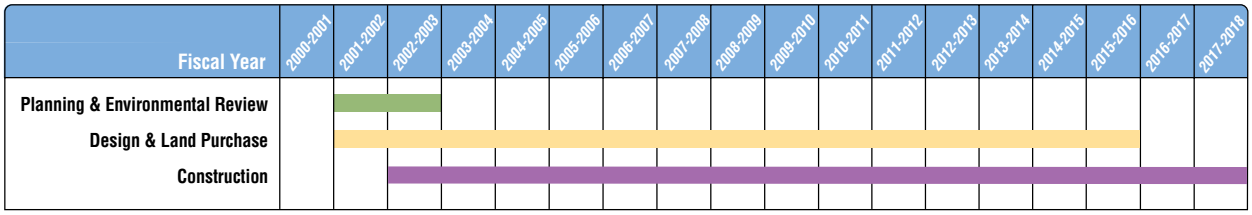
Initiation and Completion Dates

July 2001 to December 2019.

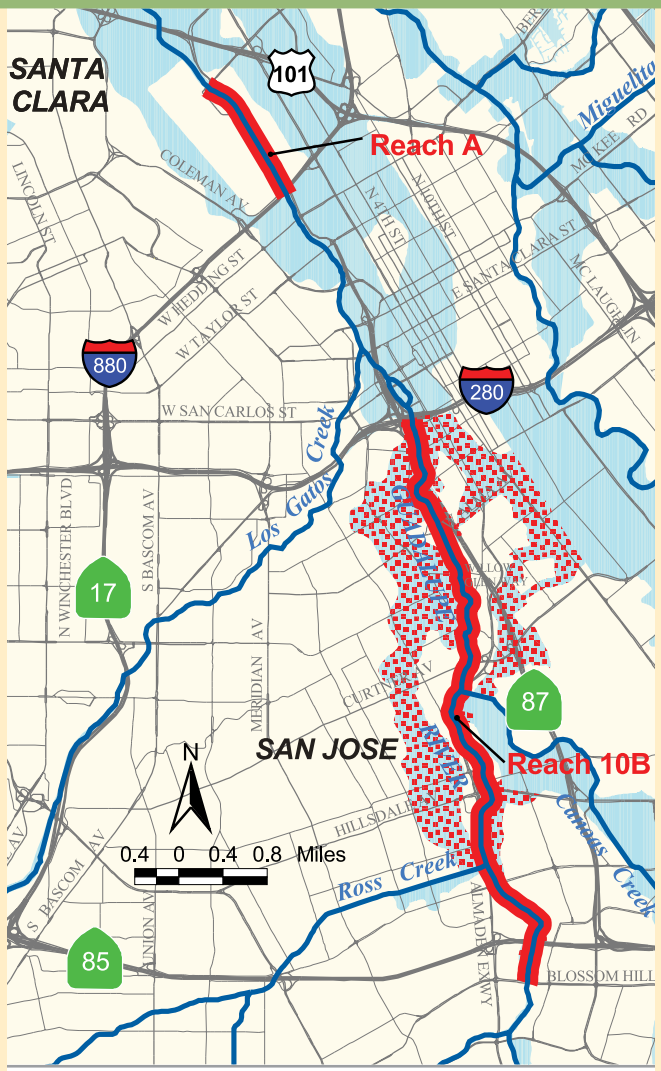
Fiscal Year 2010-2011 Project Status

- Project schedule has been delayed by three (3) years due to lack of federal funds. Pending available federal funds, the project is anticipated be completed by December 2019. (The original completion date was 2016.)
- Acquired two commercial properties, containing 8 parcels, and one easement this year; continuing to acquire properties in Reaches 7-12.
- The Corps is finalizing design options with regulatory agency staff to address necessary repair of erosion sites along Reach 10B. Repair work is scheduled for summer 2012.
- Continued coordination with the Corps and the Guadalupe Watershed Integration Working Group.
- District began construction of Reach 6 (I-280 to SPRR bridge near Willow Street in May 2010. Construction is expected to be completed in May 2012.
- District Board approved the transfer of $9.5 million from the Clean, Safe Creek funds to complete the design and begin construction of Reach 12 in June 2012. District staff is working with the Corps staff on how this additional District fund can be credited as part of the District's share of the federal Upper Guadalupe River Flood Protection Project in future years.

Current Schedule



UPPER GUADALUPE RIVER



LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Project Elements to be Implemented:

- Repair of erosion sites along Reach 10B that were caused by heavy storms in October 2009 and January 2010.
- Replace Curtner Avenue Bridge.
- Design and construct new bridge or bridge extension at: Willow Street, West Virginia Street, Alma Street, and the UPRR Crossing.
- Create additional 8,500 linear feet of vegetated shading canopy and 5½ acres of riparian forest.
- Allow for six miles of future park and trail development that will connect Almaden Valley to downtown San José.

Project Elements Completed:

- Willow Glen Way Bridge replacement (October 2007)
- Removal of eight (8) fish barriers removed to provide fish access to 19 miles of stream habitat. (October 2008)
- Reach 10B improvements (January 2010)

Flooding from Guadalupe River under Highway 87 at Alma Avenue in January 1995.

Berryessa Creek Flood Protection Project

Berryessa Creek is a major tributary of Coyote Creek. It drains a large portion of Milpitas and areas of East San José.

Objectives and Benefits

- Provide flood protection on Berryessa Creek from Calaveras Boulevard to 200 feet upstream of Old Piedmont Road.
- Protect more than 30 miles of streets including Calaveras Boulevard and Montague Expressway.
- Protect 1,814 parcels from 100-year flooding, as described in the original Program.
- Use setback levees and floodwalls and incorporate geomorphic channel designs where feasible to protect sensitive areas, minimize impacts to riparian and fisheries habitat, and provide a more sustainable creek corridor.
- Provide revegetation mitigation to protect the riparian and wetland environment.
- Implement sediment control measures to improve water quality and reduce maintenance.
- Accommodate the cities' trail master plans that provide stream-side access along the creek.

Program Allocation and Project Cost

Total anticipated allocation:	$27.8 million ($19.0 million in 1999 dollars escalated at 3% per year)
Current estimated project cost:	$93 million; $45.2 M (Federal), 47.8 M (District)
Program funds spent to date:	$5.5 million ($923,000 expended in Fiscal Year 2010-2011)

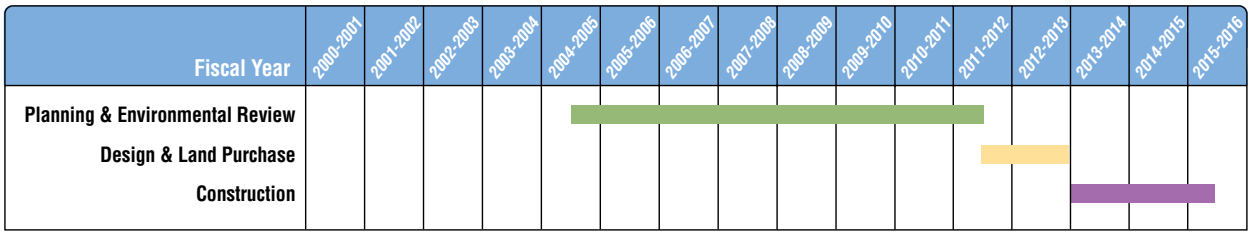
Initiation and Completion Dates (Program)

July 2001 to June 2015.

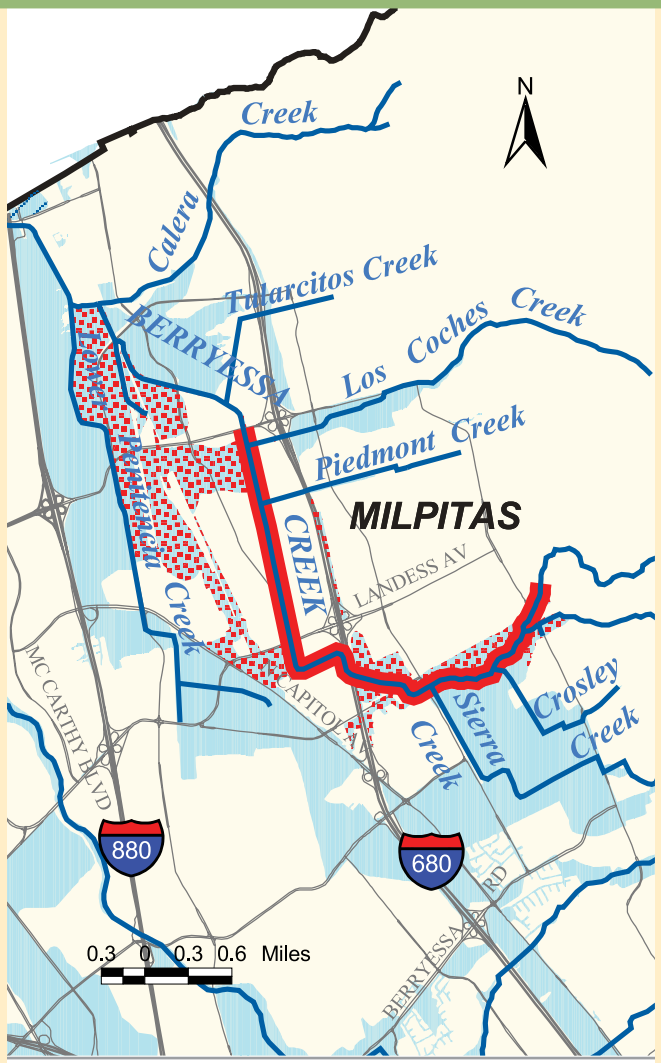
Fiscal Year 2010-2011 Project Status

- Continued coordination with VTA on the design of the future BART station at Montague Expressway.
- Continued coordination with City of Milpitas on culvert design at Milpitas Blvd.
- Continued coordination with the Corps on preparation of the General Reevaluation Report (GRR) and Environmental Impact Report/Statement (EIR/EIS) on a reduced project length extending from Calaveras Boulevard up to Interstate 680.
- The reduced project, when fully implemented, will protect 1,662 parcels from the 100-year flood (Revised per 2009 U.S. Army Corps of Engineers' study).

Current Schedule



BERRYESSA CREEK



LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Potential Project Elements:

- Channel excavation and widening, including low levees between Calaveras Boulevard and Interstate 680.
- Bridge/culvert modifications for Yosemite Drive and Ames Avenue, and replacements for ten (10) other crossings/intersections, including Calaveras Boulevard and Montague Expressway.
- Recreational features between Calaveras Boulevard and Interstate 680.

Business flood damage from Berryessa Creek flooding.

Coyote Creek Flood Protection Project

(Planning, design, and partial construction only)

The Coyote Creek watershed is the largest in Santa Clara County, draining Milpitas and portions of San José and Morgan Hill. This project provides planning, design and partial construction to protect residential, commercial and business districts in central and north San José.

Objectives and Benefits

- Provide planning, design, and partial construction of flood protection measures on Coyote Creek, from Montague Expressway to Interstate 280. The length of project that will be constructed is dependent on available funds.
- Identify environmental restoration and enhancement benefits where opportunities exist.
- Identify recreation enhancements where opportunities exist.
- Incorporate revegetation and aesthetic elements similar to the Coyote Creek park chain.

Program Allocation and Project Cost

Total anticipated allocation:	$38.6 million ($32 million in 1999 dollars escalated at 3% per year)
Current estimated project cost:	Planning/Design/Partial Construction not to exceed $38.6 million
Program funds spent to date:	$9.1 million ($678,000 in Fiscal Year 2010-2011).

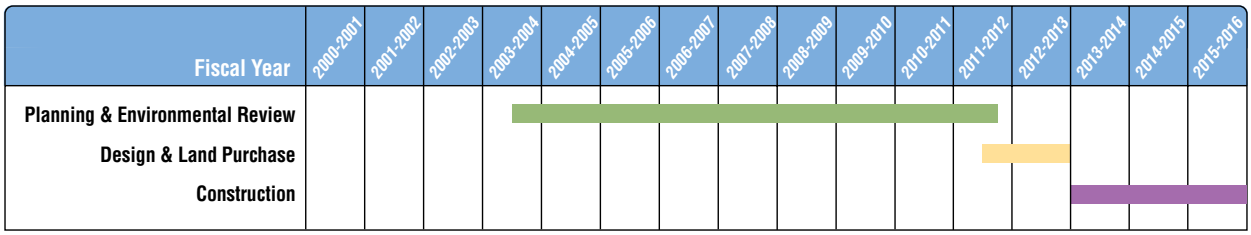
Initiation and Completion Dates

July 2001 to June 2016.

Fiscal Year 2010-2011 Project Status

- Continued monitoring channel cross sections for channel aggradation and degradation areas.
- Completed analysis on reservoirs and off-stream conceptual alternatives and held several neighborhood association and community meetings to solicit input. Results were included in the Conceptual Alternative Report.
- Started downstream survey work for hydraulic analysis verification.
- Continued fishery sampling study.
- Continued alternatives' analysis and preparation of Planning Study Report.

Current Schedule



COYOTE CREEK

LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design

Project Alternatives to be evaluated Include:

- Upstream and off-stream storage of peak flood flows.
- Channel widening
- Floodwalls and levees
- Bypass channel
- Channel deepening

Existing Charcot Road Bridge over Coyote Creek, undersized to pass the 1% flood, as determined by Coyote Creek Flood Protection Project.

Upper Llagas Creek Flood Protection Project

The Llagas Creek watershed covers 104 square miles in Gilroy, San Martin and Morgan Hill, and includes commercial and agricultural developments, as well as rapidly expanding residential areas. Upper Llagas Creek protects the urban area of Morgan Hill from the 1 percent flood and reduces the frequency of flooding in other areas.

Objectives and Benefits

- Provide flood protection between Buena Vista Road and Wright Avenue.
- Protect 1,397 parcels from 100-year flooding.
- Provide a more aesthetically pleasing and environmentally sound project than the concrete channel originally outlined in the 1982 Engineer's Report.
- Provide additional wetland area and riparian habitat, and support steelhead migration.
- Implement erosion reduction measures to improve water quality.
- Provide potential for other entities to develop recreational areas including trails, sports fields, and parks.

Program Allocation and Project Cost

Total anticipated allocation:	$32.4 million ($12.7M from Clean Safe Creeks +$10.5M from State Subventions = $23.2M in 1999 dollars escalated at 3% per year) (also see asterisk footnote on page 7)
Current project cost estimate:	The 2006 Corps' project cost reassessment updated the total project cost to $105 million, with the federal share at $65 million and the local and state share at $40 million.
Program funds spent to date:	$12 million ($2,595,000 in Fiscal Year 2010-2011)

The Water Resources Development Act (WRDA) 2007 Legislation was approved by Congress in November 2007 and reauthorized the project with the updated project cost. With Program funds of $17.3 million available to this project through 2016, approximately $23 million in state subvention reimbursements would be required to complete local sponsor's share of project costs.

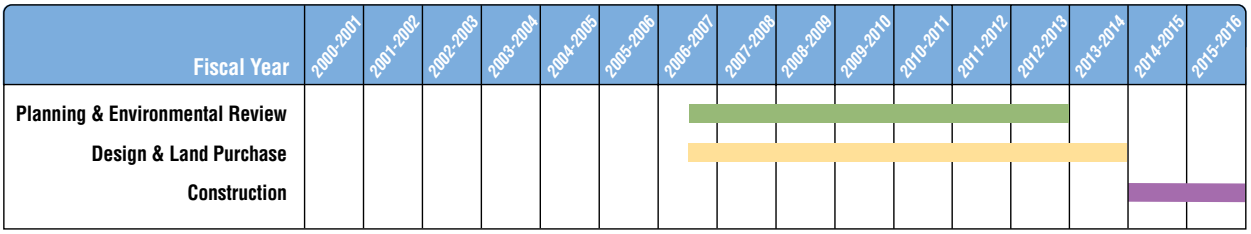
Initiation and Completion Dates (Program)

July 2001 to June 2016.

Fiscal Year 2010-2011 Project Status

- Continued coordination and support of Corps' efforts.
- The Corps has retained an environmental consultant to prepare the project Environmental Impact Statement/Report (EIS/R). Progress has slowed down due to lack of federal funding. The District began a process of taking over the Corps' EIR/S consultant contract.
- The District and the City of Morgan Hill executed a cost share agreement to fund project design with local monies. The District's design consultant progressed technical investigations and surveys to begin 30% designs.

Current Schedule



UPPER LLAGAS CREEK

LEGEND

- Flood Prone Area
- Tidal Flood Plain Limits
- Flood Prone Area Removed by Program
- Planning and Design
- Flood Damages Reduced

Project Elements to be Implemented:

- Channel widening and culvert improvements
- Diversion (bypass) channel to relieve flooding
- Historic creek restoration

Flooding from Llagas Creek at Watsonville Road in Morgan Hill in 1997.

Outcome 1: Flood Protection Projects (Identified Features that Support Outcomes 2, 3, and 4)

				Outcome 2	Outcome 3	Outcome 4
Watershed	**Project Name**	**Project Description**	**Project Stage**	**Water Quality Improvement**	**Healthy Creek and Bay Ecosystems**	**Opportunities for Trails and Open Space**
Lower Peninsula/ West Valley	Permanente Creek	Flood protection project from SF Bay to El Camino Real. May include off-stream storage, channel widening, replacement/upgrade of box culverts, and potential trail opportunities.	Planning/Design		Provide red-legged frog habitat	
Lower Peninsula/ West Valley	San Francisquito Creek	Flood protection project (planning and design) from SF Bay to Searsville Dam. Includes feasibility study, engineer's report, and EIR/EIS.	Planning/Design		Possible flood bench for pickleweed–salt marsh harvest mouse & clapper rail habitat	
Lower Peninsula/ West Valley	Sunnyvale West Channel	Flood protection project from Guadalupe Slough to HWY 101. May include construction of flood walls, raising levees, and building new culverts.	Planning	Bank erosion protection		Pond A4 trail opportunities
Lower Peninsula/ West Valley	Calabazas Creek	Flood protection project from Miller Avenue to Wardell Road. Includes replacement of bridges/ culverts and extensive bank erosion repair, and may identify potential enhancement and trail opportunities.	Construction	Bank erosion protection	Potential red-legged frog habitat in "basin" area	
Lower Peninsula/ West Valley	Sunnyvale East Channel	Flood protection project from Guadalupe Slough to I-280. May include channel widening, raising of levees, erosion protection measures and bridge/culvert replacement.	Planning	Bank erosion protection		Pond A4 trail opportunities
Guadalupe	Upper Guadalupe River	Flood protection project from I-280 to Blossom Hill Rd. Includes geomorphic floodplain design, channel widening, bridge replacement, removal of nine fish barriers, enhancing 8,500 lineal feet of vegetated shading canopy, and trail opportunities.	Design/ Construction	Reduce bank erosion by implementing geomorphic design features	Preserve and enhance existing vegetation, fisheries and wildlife habitat; remove 9 fish migration barriers, revegetate approx. 20 acres.	Approx. 5.7 miles of trail opportunities
Coyote/ Uvas-Llagas	Berryessa Creek	Flood protection project from Calaveras Blvd to 200 ft upstream of Old Piedmont Rd. May include new box culvert barrels, floodwalls and levees, revegetated areas, and trail opportunities.	Planning		Provide riparian vegetation habitat and floodplains	Approx. 1.4 miles of trail opportunities
Coyote/ Uvas-Llagas	Coyote Creek	Flood protection project from 6 miles upstream of Montague Expressway to I-280 (planning, design, partial construction). May include upstream and off-stream storage, channel widening improvements, bridge replacement, and potential enhancement and trail opportunities.	Planning	Bank erosion protection	Remove overgrown and non-native vegetation	Approx. 6 miles of trail opportunities
Coyote/ Uvas-Llagas	Upper Llagas Creek	Flood protection project from Buena Vista Ave to Wright Ave (includes West Little Llagas Creek). Includes widening creek channel, culvert improvements, bypass channel, historic creek restoration, and potential trail opportunities.	Planning/ Design			

Activity 1.2

Sediment removal to preserve flood protection capacity of creeks.

Fifteen-Year Goal

Remove approximately 120,000 cubic yards of sediment from all creeks.

How This Activity Will Be Measured

The annual amount of sediment removed that is funded by the Program will be tracked. Additionally, the overall creek capacity restored will be measured.

Committee Assessment/Recommendation of this Activity

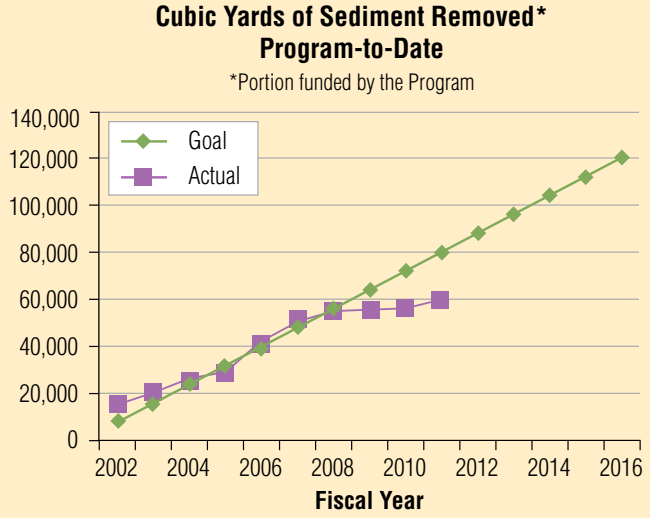
The average annual goal is 8,000 cubic yards of sediment removal from all channels. The District has removed 58,988 cubic yards program-to-date versus a program-to-date target of 72,000 cubic yards. The amount of sediment in a stream is dependent upon the amount and intensity of rainfall. Over the past few years, Santa Clara County has experienced less intense storms, therefore, less sediment has deposited in streams that need removal. The objective of sediment removal is to maintain a stream's designed water carrying capacity. This capacity has been maintained, although the amount of sediment removal was less than the annual estimation of the program. The cost of removing sediment from channels depends on many factors including: location of removal sites and complexity of the environmental settings (e.g., tidally influenced sites versus sites in channels that are in urban or upland settings, etc.); regulatory requirements and Best Management Practices associated with the removal activities and their potential impacts on the environment; ease of access to removal sites and constraints on staging and mobilizing equipment; complexity and duration of dewatering operations necessary to allow the removal activities; proximity to sediment disposal sites and availability of sediment reuse options; soil profiling and characterization requirements for disposal or reuse purposes; and the amount of vegetation and other characteristics of the removed sediment requiring special handling and disposal provisions.

Annual Performance Table

Sediment Removal

Fiscal Year	Annual*	
	Planned	Actual
2001 – 2002	8,000	14,700
2002 – 2003	8,000	5,700
2003 – 2004	8,000	4,600
2004 – 2005	8,000	3,700
2005 – 2006	8,000	13,000
2006 – 2007	8,000	9,200
2007 – 2008	8,000	3,400
2008 – 2009	8,000	738
2009 – 2010	8,000	1,741
2010 – 2011	8,000	2,209
Total	**80,000**	**58,988**

15-year Program Graph



**The number represents 10% of the total cubic yards removed, 10% of the project is funded by the Clean, Safe Creeks and Natural Flood Protection Program.*

MEASURE

What is being measured?

Cubic yards of sediment removed from District creeks.

Target

120,000 cubic yards of sediment removed from all creeks by 2016.

Challenges to Intended Outcome

Challenges to this activity are factors outside of District control. Examples are increases in dump fees, availability of places to dump the sediment, and permits from regulatory agencies. It may not be necessary to remove 120,000 cubic yards of sediment by Fiscal Year 2015-2016 depending on how well the District achieves other sediment source reduction and flood protection activities. This should be a consideration in the final performance evaluation for this activity.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

In Fiscal Year 2010-2011, the Program was responsible for the removal of 2,209 cubic yards of sediment from creeks countywide. This sediment removal work restored 6.9 miles of creek channel capacity. Due to the amount of sediment that tested as available to reuse at Pond A8 in Fiscal Year 2010-2011, the cost per cubic yard removed was less than Fiscal Year 2009-2010. The larger the amount of sediment removed at a site and its availability for reuse, the further these minimum sunk costs are spread and the lower the unit cost per cubic yard achieved.

Trend and Explanation

The District has removed 58,988 cubic yards program-to-date, which is below the program-to-date target of 72,000 cubic yards.

Projections are based on long-term historical averages. The amount of sediment depends on whether there is a wet or dry year and how early or late the storms come each season. Some years there is more sediment to remove and some years there is less. The goal is to keep the creeks maintained to their design flow conveyance capacities.

West Valley Watershed — San Tomas Creek

Financial Consideration

The estimated annual allocation (inflated) for this activity is $391,000. The amount spent in Fiscal Year 2010-2011 was $290,000 and the unspent amount of $101,000 is put aside in the reserves accumulated for this activity.

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$300,000	$496,000	-$196,000	-$196,000
2002 - 2003	$309,000	$196,000	$113,000	-$ 83,000
2003 - 2004	$318,000	$337,000	-$ 19,000	-$102,000
2004 - 2005	$327,800	$321,300	$ 6,500	-$ 95,500
2005 - 2006	$1,058,000	$936,000	$122,000	$ 26,500
2006 - 2007	$348,000	$527,000	-$179,000	-$152,500
2007 - 2008	$358,000	$374,000	-$ 16,000	-$168,500
2008 - 2009	$369,000	$232,000	$137,000	-$31,500
2009 - 2010	$380,000	$156,000	$224,000	$193,000
2010 - 2011	$391,000	$290,000	$101,000	$294,000

Activity 1.3

Maintenance of newly-improved creeks.

Fifteen-Year Goal

Preserve flood protection capacity for 46 miles of newly improved creeks maintained (levee maintenance, vegetation control and sediment removal).

How This Activity Will Be Measured

Measure maintenance funded by the Program that leads to the preservation of flood protection capacity for the 46 miles of creek flood protection improvements funded under this program. Additionally, the overall creek capacity restored will be measured once projects have been completed and maintenance is ongoing.

Committee Assessment/Recommendation of this Activity

By setting aside approximately $495,814 in Fiscal Year 2010-2011 for future maintenance, the District has fulfilled its promise to the voters on this activity for Fiscal Year 2010-2011.

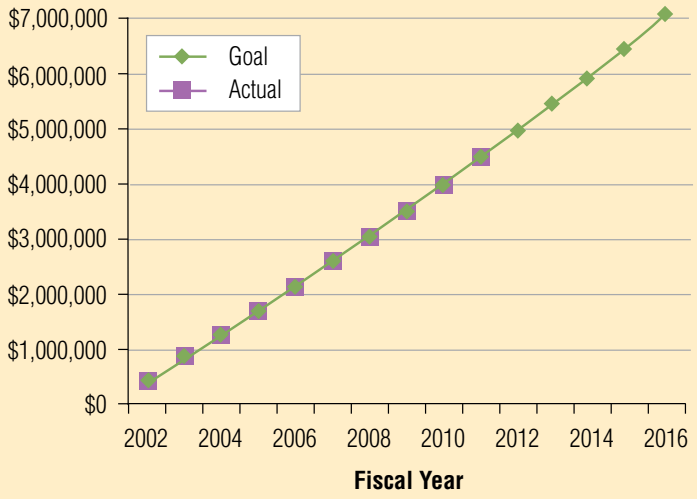
Annual Performance Table

Maintenance for Newly Improved Creeks

Annual Reserve	
Fiscal Year	Actual
2001 – 2002	$380,000
2002 – 2003	$391,400
2003 – 2004	$403,142
2004 – 2005	$415,236
2005 – 2006	$427,693
2006 – 2007	$440,524
2007 – 2008	$453,740
2008 – 2009	$467,352
2009 – 2010	$481,373
2010 – 2011	$495,814
Total	**$4,356,274**

15-year Program Graph

Maintenance of Newly Improved Creeks — Program Reserve



MEASURE

What is being measured?

Flood protection capacity for 46 miles of newly improved creeks constructed under Activity 1.1.

Target

$7.1 million in program reserve by 2016 set aside for future creek maintenance.

Final Program Target: 46 miles of newly improved creeks maintained.

Challenges to Intended Outcome

No challenges to intended outcome identified at this time.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

Approximately $495,814 in the Program reserve funds were set aside in Fiscal Year 2010-2011 for future creek maintenance.

Trend and Explanation

The intent of this activity is to set aside funds to support the on-going maintenance of newly improved creeks listed in Activity 1.1, which will extend beyond the fifteen-year goal.

Financial Consideration

Estimated annual allocation (inflated) for this activity is approximately $495,814 which was appropriated to reserves. The total appropriated in the first ten years of the Program is about $4.4 million.

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$380,000	$0,000	$380,000	$380,000
2002 - 2003	$391,400	$0,000	$391,000	$771,400
2003 - 2004	$403,142	$0,000	$403,142	$1,174,542
2004 - 2005	$415,236	$0,000	$415,236	$1,589,778
2005 - 2006	$427,693	$0,000	$427,693	$2,017,471
2006 - 2007	$440,524	$0,000	$440,524	$2,457,995
2007 - 2008	$453,740	$0,000	$453,740	$2,911,735
2008 - 2009	$467,352	$0,000	$467,352	$3,379,087
2009 - 2010	$481,373	$0,000	$481,373	$3,860,460
2010 - 2011	$495,814	$0,000	$495,814	$4,356,274

Outcome 2

There is clean, safe water in our creeks and bays

The purpose of Outcome 2 of the Program is to protect and improve water quality in local creeks that flow into the San Francisco and Monterey Bays. Clean streams provide habitat for fish, frogs, and other wildlife and enhance the quality of life for residents of the Santa Clara County. Outcome 2 supports this goal by funding programs that reduce and prevent pollution in our streams.

In Santa Clara County, local urbanization has increased reliance on local streams to provide groundwater recharge and flood water carrying capacity as well as providing an important role as habitat for native plants and wildlife species. With urbanization comes increased pavement, roads, grading, construction and a host of common human activities that impact local water bodies. The activities under Outcome 2 are designed to reduce pollution from urban runoff by working with local cities and other organizations to educate their staff and the public about pollution prevention practices.

Outcome 2 provides for increased services for response and clean up of hazardous materials incidents and illegal dumping in south County creeks.

Outcome 2 funds activities to control the additional impairment of water bodies through the development of management plans to reduce and control pollutants in our creeks such as, mercury, diazinon, copper, nickel, PCBs, fecal coliform, low dissolved oxygen, total dissolved solids, sodium, and chloride that have been identified as the cause of water quality problems by the Regional Water Quality Control Boards and the U.S. Environmental Protection Agency (EPA).

Additionally, this activity supports the District's Good Neighbor Program by funding trash removal from neighborhood creeks and graffiti removal from bridges and floodwalls.

Submitted by Outcome 2 Subcommittee: Pat Waite (Chair) and Terry Trumbull

Activity 2.1

Continue to reduce pollutants from urban runoff as a co-permittee with other local agencies and expand the program to Uvas/Llagas Watersheds.

Fifteen-Year Goal

Reduce urban runoff pollutants in south county cities.

How This Activity Will Be Measured

Performance for this activity is measured by implementation of pollution prevention activities that are undertaken by the District either independently or collaboratively with other south county agencies.

Committee Assessment/Recommendation of this Activity

The District has provided funding in support of public outreach activities defined within municipal Stormwater Management Plans (SWMPs) as approved by the Central Coast Regional Water Quality Control Board and has fulfilled its commitment to continue to provide assistance to south county cities toward development and implementation of pollution prevention measures for Fiscal Year 2010-2011. The District will continue to do the same for Fiscal Year 2011-2012 as the third year of a 3-year agreement.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

District efforts for this activity are focused on reducing pollutants in the cities of Gilroy and Morgan Hill, in accordance with stated outcome in the Clean, Safe Creeks and Natural Flood Protection Program. The cities of Gilroy and Morgan Hill are the only incorporated cities within the area targeted for expansion of the urban runoff program to the Uvas/Llagas watershed. Additionally, these are the only cities that are (a) not included within pre-existing Phase I municipal stormwater efforts, (b) are subject to the more recent Phase II permitting, and (c) are within the jurisdiction of the Central Coast Regional Water Quality Control Board. Each municipality's SWMP has or will establish their municipal compliance activities in each of six required Phase II Stormwater Permit program elements. These elements include: public education, public participation, illicit discharge detection and elimination, construction site stormwater runoff control, post construction stormwater management, and pollution prevention for municipal operations.

On May 12, 2010, the District's Chief Executive Officer approved agreements with both the cities of Morgan Hill and Gilroy to extend annual funding in the amount of $15,000 to each city for Fiscal Year 2009-2010 and increase funding to $20,000 for Fiscal Year 2010-2011 and Fiscal Year 2011-2012. The City of Gilroy utilized only $7,100 out of the total $20,000 allocation, whereas the City of Morgan Hill utilized the full $20,000 allocated funding for this Fiscal Year 2010-2011.

The City of Morgan Hill utilizes these funds for Pollution Prevention Campaigns and Events and litter clean-up events. The City of Gilroy uses the funding to support both its "Maintain-a-Drain," "Adopt-a-Drain," and "Adopt-a-Spot" programs. The agreements with both cities also allow the flexibility for additional pollution prevention tasks to be identified and funded.

During Fiscal Year 2010-2011 (the second year of a 3-year agreement) the City of Morgan Hill used the Program grant to help fund education campaign and litter cleanup events including:

1. Install a 150-feet stormwater drainage swale and detention pond to remove stormwater sediment runoff as a demonstration project for area developers.
2. Hosted an Earth Day event on April 21, 2011, where 8,500 event flyers were distributed directly to school children via local schools.
3. Organized litter clean-up events during the Coastal Cleanup Day on September 25, 2010, and City Beautification Day on May 21, 2011, that resulted in fifty bags (50) full of trash removed over a span of 1800 feet of West Little Llagas Creek.

The City of Gilroy also used District contracted funds to help fund supplies and protective equipment for 235 volunteers, to remove approximately 2,240 pounds of trash and litter from 190 storm drain inlets and catch basins, and to protect 16 miles of creek.

The District also continues to participate as a co-permittee with the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP). Utilizing resources, common work efforts, and expertise available through SCVURPPP, the District has funded a broad suite of urban runoff pollution prevention studies and administrative programs to ensure new development hydro-modification management (installation of swales, landscape features, and detention systems that treat and slow the flow of urban runoff), pollutant source control, and public outreach.

Trend and Explanation

The District's performance in Fiscal Year 2010-2011 is on pace with annual objectives.

To support the Activity 2.1 goal, the District Board took an expanded approach to reducing pollutants by approved funding in the amount of $22,500 for one (1) pollution prevention project under the 2011 Watershed Stewardship Grant Program, Pollution Prevention South County category. This project, MAPS (Making Maps Available for Stream Stewardship and Pollution Prevention in Southern Santa Clara Valley) is designed to introduce the community to a digital, interactive creek and watershed map "Watching Our Watersheds (WOW)" that can be downloaded and viewed in Google Earth at no cost. The map will show, on three-dimensional aerial imagery, the layout of watersheds and waterways, both past and present, in the southern Santa Clara Valley. Data for viewing will include stormwater information, giving people a better picture of how their water reaches the bay. The anticipated completion date for the MAPS project is December 2012.

Map of Santa Clara County Co-permittee Jurisdictions

Financial Consideration

Total estimated Program cost of this activity is $600,000. Consequently, the estimated annual allocation for this activity is calculated as an annual average of $40,000 per year, adjusted for a 3% annual inflation compounded yearly. The following table shows the fiscal status of the program (the numbers are rounded to the nearest thousand).

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$40,000	$36,000	$4,000	$4,000
2002 - 2003	$41,000	$38,000	$3,000	$7,000
2003 - 2004	$42,000	$25,000	$17,000	$24,000
2004 - 2005	$44,000	$19,000	$25,000	$49,000
2005 - 2006	$45,000	$45,000	$0	$49,000
2006 - 2007	$46,000	$42,000	$4,000	$53,000
2007 - 2008	$48,000	$44,000	$4,000	$57,000
2008 - 2009	$49,000	$38,000	$11,000	$68,000
2009 - 2010	$51,000	$45,000	$6,000	$74,000
2010 - 2011	$52,000	$50,000	$2,000	$76,000

Activity 2.2

Hazardous materials management and incident response including reservoirs for Uvas/Llagas Watersheds.

Fifteen-Year Goal

Provide hazardous material response for Uvas/Llagas Watersheds. Respond to incidents within 2 hours of initial report.

How This Activity Will Be Measured

This activity will be measured by evaluating the number of calls and the time to respond.

Committee Assessment/Recommendation of this Activity

The District met its 2-hour response commitment 100% percent of the time within the Uvas/Llagas Watershed.

Summary of Response Data

Fiscal Year	Total Reports	Total Field Responses	Uvas/Llagas Reports	Uvas Llagas Field Responses	Countywide Average Response Time	Uvas Llagas Average Response Time
2001 - 2002	68	45	4	1	63 minutes	36 minutes
2002 - 2003	137	79	12	6	60 minutes	67 minutes
2003 - 2004	150	68	7	3	57 minutes	72 minutes
2004 - 2005	113	64	10	5	56 minutes	59 minutes
2005 - 2006	122	86	12	8	53 minutes	67 minutes
2006 - 2007	107	77	9	8	51 minutes	64 minutes
2007 - 2008	115	71	9	6	65 minutes	70 minutes
2008 - 2009	116	77	7	7	58 minutes	59 minutes
2009 - 2010	93	54	11	6	54 minutes	54 minutes
2010 - 2011	128	82	9	4	41 minutes	46 minutes

MEASURE

What is being measured?

Percentage of hazardous materials reports requiring urgent on-site inspection were responded to in two hours or less.

Target

100%

Challenges to Intended Outcome

Occasionally multiple incidents occur on the same day and the current emergency response program may potentially experience difficulty meeting the 2 hour response goal. However it is rare that such an overlap prevents meeting performance standards and so staffing additional on-call responders to meet this potential challenge is not warranted based on historical performance. Other challenges to meeting timeliness performance standards include accessing remote locations, or traffic encountered when traveling to various locations in the County. Besides the challenges to meeting the timeliness performance standard the District's watershed emergency response program must maintain good working relationships with other response agencies and be trained and equipped to continue to respond effectively to a wide array of pollutants and hazardous substances.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

The District continues to achieve its key performance standard of providing a field response within 2 hours to prevent further spread of contamination or danger to health or the environment.

The District emergency response team is prepared to respond to a wide array of pollutants from illegal dumping and illicit discharges, the majority of incidents involve familiar but still potentially damaging releases such as sewage, paints, motor oils, fuels, solvents, turbid or chlorinated wastewaters, lead-acid batteries, and discarded propane tanks. Releases and potential releases that pose an immediate environmental or health risk are referred and coordinated with municipal and county fire departments and other public emergency response agencies. The District maintained an emergency response contractor to assist with investigation and clean-up of wastes to supplement internal resources.

Comparing average response times from year to year as a performance parameter is difficult as annual variances are mostly due to circumstantial factors. However, average response time countywide remains under 60 minutes, perhaps indicating greater efficiency owing to consistency and tenure among the response team. Response times for the Uvas/Llagas watershed continue to fluctuate slightly from year to year, likely owing to the greater diversity of distances averaged out over fewer responses.

Outreach efforts continue to be successful in promoting public awareness about pollution prevention in streams, thus making the Pollution Hotline notification system effective. During Fiscal Year 2010-2011 the District received notification of 128 incidents countywide with a total of 82 requiring on-site investigation, 55 of which required an urgent field response. District response to these reports averaged 41 minutes. There were 4 reports that required on-site investigation for the Uvas/Llagas watershed that were funded by the Program. The District response for urgent (Uvas/Llagas) reports averaged 46 minutes and 100% of the urgent requests were responded to on-site within two hours.

The Watersheds HAZMAT Response Program is a component of an ISO 9001 and 14001 certified Quality and Environmental Managements System (QEMS).

Regarding ordinance enforcement, cost recovery, and incident follow-up, a new Water Resource Protection Ordinance (WRPO, Ordinance 06-01) went into effect on February 28, 2007 and simultaneously repealed Ordinance 83-2. Under the WRPO violators may be served a written "compliance order" delivered in person or by US Mail to the person responsible for the violation. Following a series of prescribed hearings the District General Manager (GM) may impose administrative penalties up to $1000 per day (not to exceed $100,000 in total) for continuing violations. In addition to financial penalties the District may recoup administrative costs — potentially including any abatement costs — incurred by the District with regard to the violation. Additionally, violations of the WRPO are punishable as a misdemeanor and may also be enjoined by civil action.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Utilization of enforcement components within the WRPO is often either impractical or unnecessary when dealing with illegal dumpers. This is because the parties responsible for illegal dumping can only rarely be identified and many times the cost of enforcement may exceed the cost of simply absorbing the clean-up expense. In the case of significant spills the responsible party, if they can be identified, is usually eager to implement clean-up activities in order to avoid prosecution under more serious municipal, county, state, and federal codes. In the rare instances where an uncooperative responsible party can be identified, the District will implement ordinance provisions such as compliance orders and administrative penalties and costs as appropriate. Additionally, District ordinance violation may be added to the list of violations prosecuted by the Santa Clara County District Attorney. During Fiscal Year 2010-2011 no hazardous materials dumping incidents resulted in compliance orders, administrative penalties, administrative costs, civil actions, or misdemeanor prosecutions.

Responses to significant incidents include notification of District and/or Watershed Division Public Communications personnel who determine whether public notification is warranted. Emergency responders do not contact media outlets directly.

Trend and Explanation

The response time is within the two-hour target for 100% of the investigations requiring on-site inspection within the Uvas/Llagas watershed and 100% throughout the county as a whole.

The District's response time performance matched the 100% target achieved last fiscal year for the Uvas/Llagas watershed.

Financial Consideration

Program revenues allocated for hazardous materials reports and responses in the Uvas/Llagas watersheds are estimated to be $450,000 over the 15-year duration of the Program. Consequently, the estimated annual allocation (inflated) for this activity is calculated as the 15-year annual average of $30,000 adjusted for 3% annual inflation compounded yearly. The following table lists the actual expenditure of funds from Program revenues for each year.

Reserves are calculated as the estimated annual allocation minus the actual expenditure. By the end of the Program, cumulative reserves should be approximately zero. The table below shows actual expenditures and cumulative reserves for this activity (amounts are rounded to nearest thousand).

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$30,000	$40,000	-$ 10,000	-$ 10,000
2002 - 2003	$31,000	$53,000	-$ 22,000	-$ 32,000
2003 - 2004	$32,000	$28,000	$ 4,000	-$ 28,000
2004 - 2005	$33,000	$30,000	$ 3,000	-$ 25,000
2005 - 2006	$34,000	$30,000	$ 4,000	-$ 23,000
2006 - 2007	$34,000	$30,000	$ 5,000	-$ 18,000
2007 - 2008	$36,000	$30,000	$ 6,000	-$ 12,000
2008 - 2009	$37,000	$30,000	$ 7,000	-$ 5,000
2009 - 2010	$38,000	$30,000	$ 8,000	$ 3,000
2010 - 2011	$39,000	$30,000	$9,000	$12,000

Activity 2.3

Impaired water bodies improvement

Fifteen-Year Goal

Reduce or prevent additional impairment of water bodies in Santa Clara County.

How This Activity Will Be Measured

This activity will be measured by naming and describing the number and type of impaired water bodies, and by tracking the change in impaired water body designations within Santa Clara County. The baseline will be established by using the Regional Water Quality Control Board's (Regional Board) designations of impaired water bodies when the Program's measure was adopted with updates provided after each subsequent listing cycle.

Committee Assessment of this Activity

The District has met its commitment on this activity for Fiscal Year 2010-2011.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

Background information for the material presented below is provided in the pages following this section.

Mercury in Guadalupe River Watershed

Guadalupe River Watershed has been ranked as high priority for use of this activity's funds since the District has the ability to reduce mercury to certain extent via mitigation measures at reservoirs or within the bed and bank of the creeks on District's Rights of way.

Definition of TMDL

The Total Maximum Daily Load (TMDL) document defines the current and allowable pollutant levels for a specific waterbody and includes an implementation plan to achieve allowable levels of the pollutant that will restore the beneficial uses of the water body.

The San Francisco Bay Regional Board Final **Total Maximum Daily Load** Project Report and Proposed Basin Plan Amendment (TMDL for Mercury) proposes to restore beneficial uses by requiring the District to: a) reduce methyl mercury formation in Lake Almaden, and in the Calero, Almaden, and Guadalupe Reservoirs; b) conduct sediment removal projects in strategic areas, such as along Alamitos Creek and behind the Los Alamitos Drop Structure; and, c) conduct stream restoration projects in areas where mine wastes are eroding and/or where habitat is limited due to mine wastes.

Towards these objectives, District activities in Fiscal Year 2010-2011 consisted of the following:

1. Monitoring results of the treatment system in Lake Almaden. The four solar powered circulators installed in Lake Almaden between 2006 and 2010 provide treatment of the entire lake. Reductions of methyl mercury production have been observed as high as 96% compared to baseline concentrations.
2. Monitoring the results of the treatment systems in the Almaden and Guadalupe reservoirs, and monitoring existing conditions in Calero Reservoir.
3. A pilot oxygenation system for use in Almaden Reservoir and Guadalupe Reservoir was ordered. An oxygenation system for use in Calero Reservoir (to reduce methyl mercury formation) was ordered and a preliminary report was prepared describing the opportunities and constraints to restore Alamitos Creek to bypass Almaden Lake and reduce methyl mercury production.
4. A Coordinated Monitoring Plan (CMP) to monitor mercury in the fish and mercury loading to San Francisco Bay was developed and submitted to the California Regional Water Quality Control Board, San Francisco Bay Region (Regional Board). In April 2010, District Board of Directors approved a cost sharing agreement (Agreement) between the District, Santa Clara County Parks, Guadalupe Rubbish, and the Mid-Peninsula Regional Open Space District to fund the CMP, and comply with the Guadalupe River Watershed Mercury TMDL. This joint agreement saved the District over $50,000.

Impaired Water Bodies Prevention

A monitoring program to track water quality was continued for Stevens Creek, Chesbro, Uvas, Lexington, and Coyote reservoirs. This monitoring program is also intended to provide reference data to compare to the Guadalupe River Watershed data that is being collected as described above.

During this reporting period, the District completed the following activities:

- Encumbered funds for an oxygen injection system for use in Almaden reservoir and Guadalupe Reservoir to reduce the production of methyl mercury;
- Continued monitoring activities to track water quality and monitor treatment system performance in Lake Almaden, Almaden Reservoir, and Guadalupe Reservoir.

Treatment systems to reduce mercury in fish are now operating in two reservoirs and one lake in the watershed. Treatment systems are being purchased to enhance the systems in the reservoirs and to treat a third reservoir. With respect to the District's responsibility, available funding will be expected to achieve the goals for the mercury TMDLs. An updated list of impaired water bodies within the Santa Clara County is shown in Table 2.3A.

Table 2.3A: 2010 Clean Water Act Section 303 (d) List of Impaired Water Bodies in Santa Clara County

Pollutant	Water Body
Mercury	Almaden Reservoir, Almaden Lake, Alamitos Creek, Anderson Reservoir, Calero Reservoir, Guadalupe Creek, Guadalupe Reservoir, Guadalupe River, Stevens Creek Reservoir, Chesbro Reservoir, Uvas Reservoir
Trash	Coyote Creek, Guadalupe River, Matadero Creek, Permanente Creek, San Francisquito Creek, San Tomas Aquinas Creek, Saratoga Creek, Silver Creek, Stevens Creek
PCBs (Polychlorinated biphenyls)	Anderson Reservoir, Stevens Creek Reservoir, Pajaro River
Chlordane	Stevens Creek Reservoir, Pajaro River
Dieldrin	Stevens Creek Reservoir, Pajaro River
Diazinon	Calabazas Creek, Coyote Creek, Guadalupe River, Los Gatos Creek, Matadero Creek, Permanente Creek, Saratoga Creek, San Felipe Creek, San Francisquito Creek, Stevens Creek
Toxicity	Permanente Creek, Stevens Creek
Total Selenium	Permanente Creek
Temperature	Stevens Creek, Llagas Creek, Uvas Creek
Sedimentation/Siltation	San Francisquito Creek, Pajaro River, Llagas Creek, Pescadero Creek
Nutrients	Pajaro River, Llagas Creek
Fecal Coliform	Carnadero Creek, Corralitos Creek Llagas Creek, Pajaro River, Sycamore Creek, Pacheco Creek
Low Dissolved Oxygen	Carnadero Creek, Llagas Creek, Pajaro River, Uvas Creek, Pacheco Creek
Sodium	Llagas Creek, Pajaro River, Sycamore Creek
Total Dissolved Solids	Llagas Creek
Turbidity	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Uvas Creek, Pacheco Creek
Boron	Pajaro River
Chloride	Llagas Creek, Pajaro River, Sycamore Creek
Chlorpyrifos	Pajaro River, Llagas Creek
DDD (Dichlorodiphenyldichloroethane)	Pajaro River
Escherichia coli	Carnadero Creek, Corralitos Creek, Pajaro River
Nitrate	Carnadero Creek, Pajaro River
pH	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Uvas Creek

Background

The main focus of this activity is to improve the water quality of our creeks, reservoirs and bays. In 1998, regulatory agencies identified specific pollutants that impaired our waterbodies based on the available data at that time. In order to address these impairments, regulatory agencies have formulated a planning document that would limit the amount of pollutant levels in any waterbody by identifying the TMDL for these waterbodies for each pollutant. This planning document has eight phases of development that are described in the table below. The goal of the TMDL document is to determine the current and allowable pollutant levels for a specific waterbody and prepare an implementation plan to achieve allowable levels.

Phases of Regional Boards TMDL Process

Eight phases in the TMDL process are defined by the California Regional Water Quality Boards, in concert with the EPA. These phases are defined below and are shown in Table 2.3B.

1. Identify quality limited water bodies and prepare a list (303(d)) of waters that do not meet water quality standards.
2. Compile existing data, identify data gaps, develop study plans, inform and engage stakeholders.*
3. Data collection and interpretation to identify and quantify pollutant sources and to determine any linkage between those sources and resource impairment.*
4. Develop a technical TMDL report for impaired water bodies in order to achieve water quality standards, allow for seasonal variations, and provide a margin of safety.
5. Develop a TMDL implementation plan of control actions and a monitoring plan to develop and achieve the required load reductions.
6. Incorporate the technical TMDL, implementation plan, and monitoring plan into the Basin Plan.
7. Obtain regulatory approval of the TMDL and Implementation Plan from State Water Resources Control Board (State Water Board), Office of Administrative Law, and EPA.
8. Regional Boards and source owners implement control measures and monitor performance and results.

** District can assist the Regional Boards with this phase*

The Regional Boards' current list of impaired water bodies in Santa Clara County is shown on the previous page.

The schedule for development of the TMDLs is the responsibility of the Regional Water Quality Control Boards.

Table 2.3B: Status of TMDLs for Impaired Water Bodies (Phase definition of previous page)

Pollutant	Water Body	TMDL Start Date	2011 TMDL Phase Statusf (Completed/In Progress)							
			1	2	3	4	5	6	7	8
Mercury	Alamitos Creek, Calero Reservoir, Guadalupe Creek Guadalupe Reservoir, Guadalupe River	2001								
Mercury	Almaden Reservoir, Almaden Lake, Alamitos Creek, Anderson Reservoir, Stevens Creek Reservoir, Chesbro Reservoir, Uvas Reservoir	TBD								
Trash	Coyote Creek, Guadalupe River, Matadero Creek, Permanente Creek, San Francisquito Creek, San Tomas Aquinas Creek, Saratoga Creek, Silver Creek, Stevens Creek	TBD								
PCBs (Polychlorinated biphenyls)	Anderson Reservoir, Stevens Creek Reservoir	2007								
PCBs (Polychlorinated biphenyls)	Pajaro River	TBD								
Chlordane	Stevens Creek Reservoir	2007								
Chlordane	Pajaro River	TBD								
Dieldrin	Stevens Creek Reservoir	2007								
Dieldrin	Pajaro River	TBD								
Diazinon	Calabazas Creek, Coyote Creek, Guadalupe River, Los Gatos Creek, Matadero Creek, Permanente Creek, Saratoga Creek, San Felipe Creek, San Francisquito Creek, Stevens Creek	2000								
Toxicity	Stevens Creek	2007								
Toxicity	Permanente Creek	TBD								
Total Selenium	Permanente Creek	TBD								
Temperature	Stevens Creek, Llagas Creek, Uvas Creek	TBD								
Sedimentation	Pajaro River, Llagas Creek	2003								
Sedimentation	San Francisquito Creek	2000								
Sedimentation	Pajaro River, Llagas Creek	2003								
Nutrients	Pajaro River, Llagas Creek	2001								
Fecal Coliform	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Sycamore Creek	TBD								
Low Dissolved Oxygen	Carnadero Creek, Llagas Creek, Pajaro River, Uvas Creek	TBD								
Sodium	Llagas Creek, Pajaro River, Sycamore Creek	TBD								

Phase Completed Phase In Progress Phase Completed/In Progress this Reporting Period

Table 2.3B: Status of TMDLs for Impaired Water Bodies (Phase definition of previous page)

Pollutant	Water Body	TMDL Start Date	2011 TMDL Phase Statusf (Completed/In Progress)							
			1	2	3	4	5	6	7	8
Total Dissolved Solids	Llagas Creek	TBD								
Turbidity	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Uvas Creek, Pacheco Creek	TBD								
Boron	Pajaro River	TBD								
Chloride	Llagas Creek, Pajaro River, Sycamore Creek	TBD								
Chlorpyrifos	Pajaro River, Llagas Creek	TBD								
DDD (Dichlorodiphenyldichloroethane)	Pajaro River	TBD								
Escherichia coli	Carnadero Creek, Corralitos Creek, Pajaro River	TBD								
Nitrate	Carnadero Creek, Pajaro River	TBD								
pH	Carnadero Creek, Corralitos Creek, Llagas Creek, Pajaro River, Uvas Creek	TBD								

Phase Completed Phase In Progress Phase Completed/In Progress this Reporting Period

Annually, the District reviews the list of impaired water bodies and prioritizes them for use of this activity's funds as high, medium, or low according to geographic scope, District ownership and/or control of pollutant sources, and ease of implementation of source controls.

Financial Consideration

Estimated annual allocation (inflated) for this activity is $1.4 million. During Fiscal Year 2010-2011, the District spent a total of $905,000. The accumulated reserve balance for this activity is $3.9 million as of Fiscal Year 2010-2011.

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$1,060,000	$442,000	$618,000	$618,000
2002 - 2003	$1,092,000	$1,260,000	$(168,000)	$450,000
2003 - 2004	$1,125,000	$841,000	$284,000	$734,000
2004 - 2005	$1,158,000	$694,500	$463,500	$1,197,500
2005 - 2006	$1,193,000	$603,000	$590,000	$1,787,500
2006 - 2007	$1,229,000	$689,000	$540,000	$2,327,500
2007 - 2008	$1,266,000	$755,000	$511,000	$2,838,500
2008 - 2009	$1,304,000	$854,000	$450,000	$3,288,500
2009 - 2010	$1,343,000	$1,256,000	$87,000	$3,375,500
2010 – 2011	$1,383,000	$905,000	$478,000	$3,853,500

Activity 2.4

Neighborhood creeks frequently inspected and cleaned of litter and graffiti

Fifteen-Year Goal

60 creek cleanup events (4 per year). Response time to remove litter and graffiti of less than 5 working days. Additional safety fence around creeks is installed or repaired as needed.

How This Activity Will Be Measured

The measurement for this activity will be the annual number of cleanup events and the cumulative amount of trash removed from area creeks. Additionally, the number of calls for service versus the time to respond will be measured.

Committee Assessment/Recommendation of this Activity

Considering the large number of requests, the District responded to all requests with the 5-day target. Additionally, the District met the commitment of holding 4 major clean-up events.

MEASURE

What is being measured?

Response time to remove litter and graffiti in less than 5 working days.

Target

100%

Challenges to Intended Outcome

Cleaning creeks of debris to a level that will improve public satisfaction. The District will continue to measure the amount of trash removed from creeks and the public's satisfaction in the District's response. At the same time, the District will be promoting and actively engaging in pollution prevention strategies so that future success will be measured more by public satisfaction than by pounds of trash found in and removed from our local streams.

Tracking the amount of trash removed as a measure of the success for this activity can conflict with success of other programs that are targeted at reducing the amount of trash, litter, and graffiti in the creeks.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

The District conducted 4 cleanup events. A cleanup event consists of a team cleaning up trash and debris at 309 high visibility locations during the year. The high visibility locations are based on visible reaches, within 150 feet of bridges, along trails, and along frontage roads, of creeks where the District has easement or fee title. The list of high visibility locations is dynamic — locations can be added or deleted based on the amount of trash or graffiti found or not found. For more information about these activities, please go to the District's website at ***www.valleywater.org***.

Neighborhood Creeks Cleanup

Fiscal Year	Number of Public Requests	Response Within 5 Days	Number of District Generated Work Orders	Litter (Cubic Yard)	Graffiti (Square Feet)
2001 – 2002	224	Not Available	269	5,500	111,262
2002 – 2003	332	Not Available	742	7,867	105,339
2003 – 2004	422	Not Available	1,693	4,233	283,015
2004 – 2005	556	Not Available	2,236	6,727	370,081
2005 – 2006	634	100%	2,533	6,866	366,972
2006 – 2007	644	98%	2,621	5,611	433,961
2007 – 2008	1,063	94%	2,452	2,854	401,333
2008 – 2009	769	98%	2,094	1,993	434,960
2009 – 2010	771	100%	2,099	1,574	392,579
2010 – 2011	524	100%	2,396	1,295	157,917
Total	**5,939**		**19,135**	**44,520**	**3,057,419**

The District received 524 requests regarding litter, graffiti, and others and 100% of the requests were responded to either verbally, in writing, or by e-mail within a 5 day period. Of the 524 requests, 434 resulted in work by District crews. Further, District staff assesses waterways and generates work orders to address priority areas of concern, which is in addition to public requests. The resulting total amount of litter and graffiti removed, generated from both public requests and District assessments, is displayed in the table above.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

The table to the right shows a breakdown of the type of work requested and the average work days for completing the work.

The District has a Memorandum of Agreement (Trash MOA) with the City of San José for trash prevention and removal activities. The annual activities associated with the MOA for Trash Prevention and Removal Services include:

1. Monthly Encampment Cleanup Program
2. Weekly Encampment Cleanup Program
3. Partnered Cleanup Projects Program

Periodically, the District collaborates with other agencies to perform joint cleanups, such as with the City of Gilroy. For example, the District partnered with the City of San José by providing $134,000 in grant funding as a local match for an Environmental Protection Agency pilot project to address pollution caused by homelessness.

Summary of Response Data

Job Description	Total Reports	Percent of Total
Trash & Debris Removal	162	30%
Fence Repair	70	13%
Graffiti Removal	96	18%
Other Misc.	9	18%
Corrective Maintenance	4	1%
Vegetation Management	93	17%
Sign Installation	0	0%
Total	**434**	

Two volunteer cleanup efforts, California Coastal Cleanup Day and the National Rivers Cleanup Day, are organized by the Creek Connections Action Group. This group consists of the District, County of Santa Clara, and the City of San José. Through these programs and its own efforts, the District works in partnership to remove trash, debris, and graffiti throughout the Santa Clara County. The Program funds 60 percent of the described activities and accomplishments under this Activity.

During the fiscal year, 1.5 miles, of safety fence around creeks were installed or repaired for a cumulative total of 7.29 miles; 157,917 square feet of graffiti was covered for a cumulative total of 2.9 million square feet.

Other miscellaneous types of work are items outside regular work that does not fit any of the categories, such as pest control issues, encroachments and flood issues during storm events.

Trend and Explanation

Efficiency of response to requests within 5 days has improved since Fiscal Year 2001-2002 and has been maintained over the last six years. Consistent with last year, 100% of the total number of requests received responses within the 5 day response window.

Sixty creeks are maintained through 4 major clean-up events annually. The cities and the County work with the District to coordinate responses for litter and graffiti removal.

Each fiscal year, as part of its continued focus on understanding customer satisfaction, the District conducts end-of-transaction surveys with those customers who requested service. However, the results of the Fiscal Year 2010-2011 survey yielded unreliable data due to a new survey format. It is anticipated that issues with administering the survey will be resolved for Fiscal Year 2011-2012.

Financial Consideration

Estimated annual allocation (inflated) for this activity is $1.3 million. During Fiscal Year 2010-2011 the District spent a total of $909,592 for this activity.

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$1,000,000	$823,000	$177,000	$177,000
2002 - 2003	$1,030,000	$1,085,000	-$55,000	$122,000
2003 - 2004	$1,061,000	$1,279,000	-$218,000	-$96,000
2004 - 2005	$1,093,000	$1,048,000	$45,000	-$51,000
2005 - 2006	$1,639,000	$1,394,000	$245,000	$194,000
2006 - 2007	$1,159,000	$833,000	$326,000	$520,000
2007 - 2008	$1,194,000	$843,000	$351,000	$871.000
2008 - 2009	$1,230,000	$887,000	$343,000	$1,214,000
2009 - 2010	$1,267,000	$890,000	$377,000	$1,591,000
2010 - 2011	$1,305,000	$910,000	$395,000	$1,986,000

ACTIVITY 2.5

Partnership with the County on general surface water quality protection program/outreach

Fifteen-Year Goal

Assist County or cities in reduction of pollutants in surface water.

How This Activity Will Be Measured

The District will measure this activity by the annual number of partnerships and collaboratives supported countywide to address general surface water quality.

Committee Assessment/Recommendation of this Activity

The District has fulfilled its commitments by partnering with the County and various cities to enhance community pollution prevention partnering efforts in Fiscal Year 2010-2011. The District will continue to support the same for Fiscal Year 2011-2012, the last year of a 3-year agreement. The Committee recommends that grants continue to be made available to non-profit organizations to research best management practices for surface water quality protection. The Committee also recommends that the District evaluate alternatives to the Green Business Program so that the program can be fulfilled objectively.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

The District fulfilled its plan to "Assist county or other cities in reduction of pollutants in surface water," and further to "partnership with the county on general surface water quality protection program/outreach" through its contributions and involvement with both the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) and the Green Business Program (GBP) administered by the County of Santa Clara Integrated Waste Management Division. The District has also partnered with the City of San José, the U.S. Environmental Protection Agency as well as others on a pilot program to educate communities and encourage creekside encampment individuals to work. This pilot program is called Clean Creeks and Healthy Communities.

SCVURPPP is an association of 13 municipal agencies, the County of Santa Clara, and the Santa Clara Valley Water District that are all bound by a Memorandum of Agreement to minimize runoff pollution to creeks and the bay. The MOA was signed in 1990 and updated in 1999, 2005, and 2006. The goal of SCVURPPP is to collaboratively work to fulfill the regulatory requirements of the San Francisco Bay Regional Water Quality Control Board's Municipal Regional Stormwater NPDES Permit (MRP) in a manner that leverages resources from the various agencies to provide protection for local water resources. The MRP expires on November 30, 2014. SCVURPPP conducts and coordinates public outreach, conducts sampling and receives water monitoring data from others, and prepares various guidance manuals and reports.

SCVURPPP has programs to address the following pollutants of concern:

- Trash
- Mercury
- Dioxins
- PCBs
- Copper
- Pesticides
- Sediment

Access to the various SCVURPPP reports including the Work Plans and Annual Reports can be found at ***www.scvurppp-w2k.com/***. Also the recently produced Program Manager Self Audit Report can be requested from Brett Calhoun of the Santa Clara Valley Water District at (408) 265-2600. The annual report for Fiscal Year 2010-2011 is not due to the RWQCB until September 15, 2010, and so is not available for reference or summarization herein.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

On December 20, 2005, the District Board of Directors voted to approve a Memorandum of Agreement (MOA) with 13 municipalities and the County of Santa Clara to continue participation and funding of SCVURPPP. $375,350, one third of the District's 30% share of the SCVURPPP annual budget, was contributed from Clean, Safe Creeks and Natural Flood Protection Program funds in August 2010.

Trend and Explanation

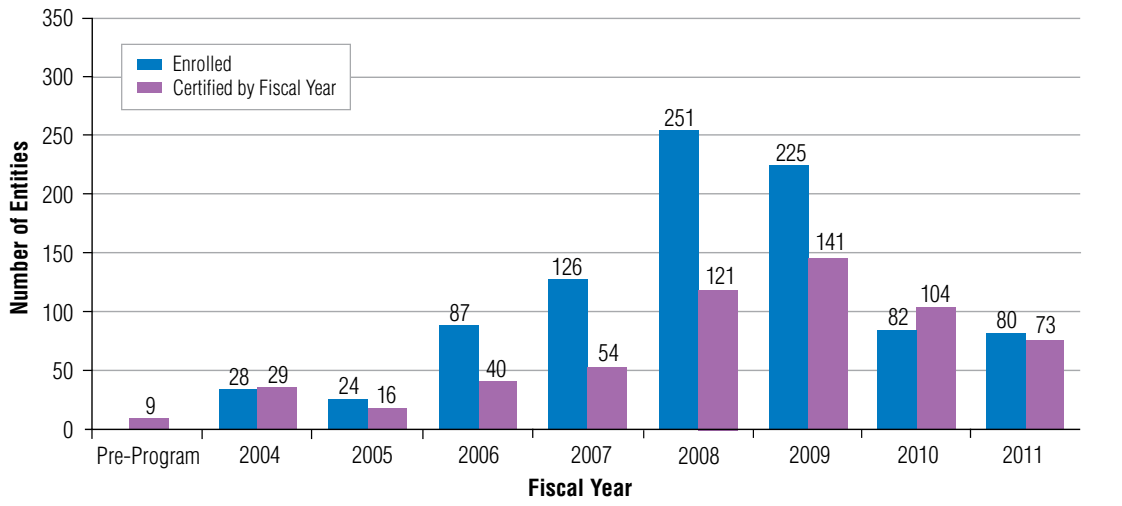
To support the Activity 2.5 goal, the District Board authorized additional funds for pollution prevention activities countywide under a Fiscal Year 2010-2011 grant round of the Watershed Stewardship Grant Program.

Background

On May 12, 2010, the District's Chief Executive Officer approved an agreement with the County of Santa Clara extending our partnership with its GBP through a 3-year grant totaling $300,000. This contract continues funding previously approved by the District Board on April 4, 2004 and again on May 8, 2007. During Fiscal Year 2010-2011, the GBP had an additional net (new certifications (73) — de-certifications (13) — re-certifications (33)) increase of 93 certified businesses, bringing the net Program funded (since the beginning of Fiscal Year 2003-2004) total to 484. During all of the years prior to initiation of Program funding, the GBP had only accumulated 8 certified entities. The performance of the Program-funded Green Business Program in Santa Clara County far out-performs the Green Business Programs in the other Bay Area Counties. Certified Green Businesses in Santa Clara County now include a diverse range of corporations, non-profits organizations, and public agencies such as the Santa Clara Valley Water District, several Santa Clara County departments, and municipal departments within the cities of Cupertino, Gilroy, Palo Alto, San Jose, and Sunnyvale. In addition to its broader scopes of water and energy conservation, GBP certifications require entities to support (1) Pollution Prevention and (2) Surface Water Runoff Reduction measures beyond levels required by regulatory code and permit conditions.

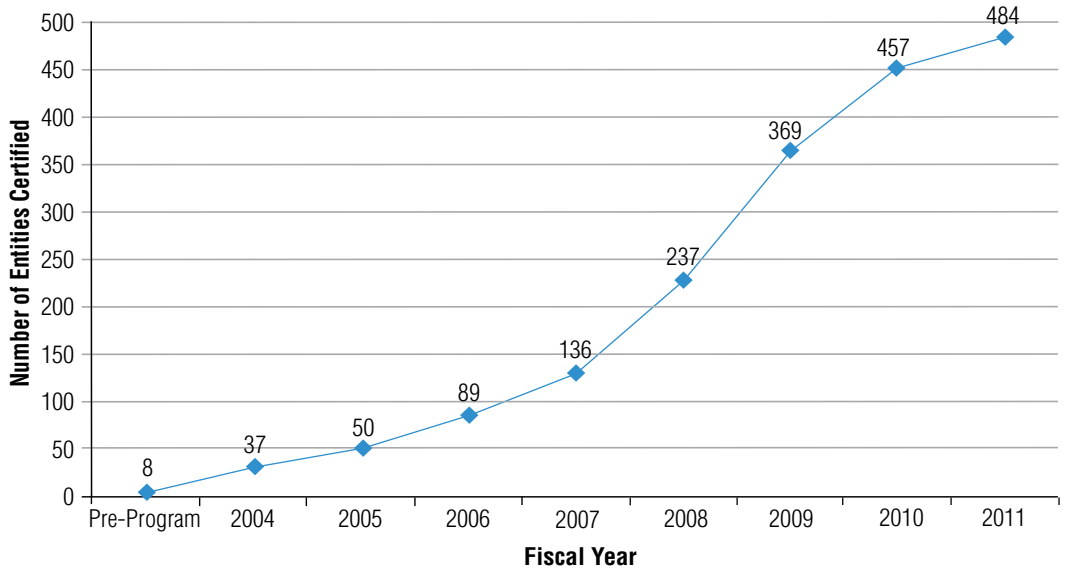
Measurement of the success of this outcome by the number of partnerships is viable and consistent with parameters used by regulatory agencies, such as State and Regional Water Quality Control Boards, to assess compliance with similar objectives and requirements within their storm water and urban runoff pollution prevention permits. Due to inherent difficulties using direct laboratory analysis to establish quantitative baselines and subsequent pollutant prevention performance and due to the assumptions necessary to infer quantitative pollutant reductions due to implementation of Best Management Practices (BMPs) regulatory agencies commonly utilize BMP implementation itself to assess storm water and urban runoff permit compliance. Likewise, Outcome 2.5 measures the number of partnerships as a direct indicator of BMP implementation and therefore pollutant reduction.

Santa Clara County Green Business Program (Annual)



STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Santa Clara County Green Business Program (Net Cumulative)



Measurement of the success of this outcome by the number of partnerships is viable and consistent with parameters used by regulatory agencies, such as State and Regional Water Quality Control Boards, to assess compliance with similar objectives and requirements within their storm water and urban runoff pollution prevention permits. Due to inherent difficulties using direct laboratory analysis to establish quantitative baselines and subsequent pollutant prevention performance and due to the assumptions necessary to infer quantitative pollutant reductions due to implementation of Best Management Practices (BMPs) regulatory agencies commonly utilize BMP implementation itself to assess storm water and urban runoff permit compliance. Likewise, Outcome 2.5 measures the number of partnerships as a direct indicator of BMP implementation and therefore pollutant reduction.

Before granting Green Business certification, the County of Santa Clara (County) conducts a stringent audit to verify that pollution control BMPs are being implemented. Increasing the number of certified businesses will therefore result in more widespread BMP implementation, reduction of pollutant loading, and improved water quality for Santa Clara County creeks and bays. Partnerships under the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) also ensure BMP implementation across many operations and development projects by all 13 municipalities, the County, and the District.

As shown in the following charts, the Program contributions and improved accountability mechanisms have coincided with improved County management of the GBP, all of which have contributed toward a significant boost in GBP effectiveness over the duration of Program funding. Through District contributions to the GBP since the beginning of Fiscal Year 2003-2004, the Program has contributed to an increase of 480 certified entities throughout the County. More information about the GBP can be obtained from their website at ***www.greenbiz.ca.gov/AboutUsSCC.html***.

Financial Consideration

Estimated annual allocation (inflated) for this activity is $509,000. During Fiscal Year 2010-2011, the District spent a total of $502,000; the accumulated reserve balance for this activity is $1.1 million at the close of Fiscal Year 2010-2011.

To support the Activity 2.5 goal, the District Board approved funding in the amount of $178,662 for five (5) pollution prevention projects under the 2011 Watershed Stewardship Grant Program, Pollution Prevention Countywide category. The projects included (organization and project name):

1. **Vision New America, inc.** — Water Pollution Prevention Education for Ethnic Minority Youth and Communities
2. **Committee for Green Foothills** — MAPS for Clean Safe Creeks
3. **West Valley College** — Vasona Creek in West Valley College Stormwater Pollution Reduction Plan
4. **Heart of the Valley, Services for Seniors, Inc.** — Pharma/Household waste Countywide Pollution Prevention Manual
5. **Friends of Los Alamitos Watershed (FOLAW)** — Los Alamitos Stewardship Grant

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$390,000	$258,000	$132,000	$132,000
2002 - 2003	$402,000	$339,700	$ 62,300	$194,300
2003 - 2004	$414,000	$158,000	$256,000	$450,300
2004 - 2005	$426,200	$149,300	$276,900	$727,200
2005 - 2006	$438,000	$126,000	$312,000	$1,039,200
2006 - 2007	$452,000	$451,000	$1,000	$1,040,200
2007 - 2008	$466,000	$426,000	$40,000	$1,080,200
2008 - 2009	$480,000	$469,000	$11,000	$1,091,200
2010 - 2011	$509,000	$502,000	$7,000	$1,104,200

Outcome 3

Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Board

Outcome three provides for crucial environmental work to protect and restore habitats and encourage the return of endangered species such as the Chinook salmon, steelhead trout, salt marsh harvest mouse, California clapper rail and California red-legged frog. The new plan includes the removal of non-native plants and re-vegetation. New community partnerships will help restore riparian and tidal habitat throughout Santa Clara County.

3.1 Vegetation Management

- Removal and maintenance of approximately 21,450 acres mostly in unimproved channels.
- In-stream vegetation control
- Access maintenance
- Re-vegetation maintenance

3.2 Habitat Restoration

- 100 acres of tidal and/or riparian habitat created or restored
- Protection for endangered species
- Removal of fish migration barriers and installation of fish ladders
- Removal of nonnative, invasive plants
- Re-vegetation of native plant species

Submitted by Outcome 3 Subcommittee: Jim Foran (Chair), Nancy Hobbs, Charles Taylor, Terry Trumbull

ACTIVITY 3.1

Vegetation management to protect healthy creek and bay ecosystems, and preserve existing floodwater conveyance capacity in creeks.

Fifteen-Year Goal

That creeks are clear of plant growth that can impede water flow and reduce the flood protection capacity; and vegetation at mitigation sites are properly monitored and managed to assure healthy habitat (of the fifteen-year target is equivalent of 22,000 acres of vegetation removed and maintained).

How This Activity Will Be Measured

This activity will be measured by tracking the acreage of vegetation managed that can impede water flow and reduce flood protection capacity, or by the acreage of removal of non-native and invasive vegetation to improve riparian habitat quality.

Committee Assessment/Recommendation of this Activity

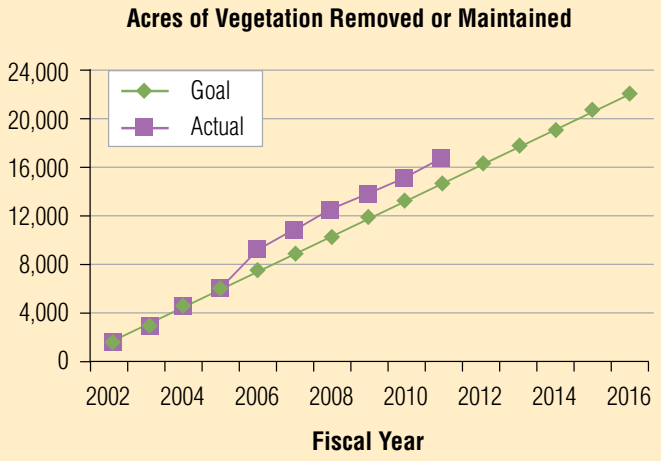
The amount of vegetation managed is ahead of the target fifteen-year Program goal. The Committee acknowledges the action of the Board to fulfill this goal and achieve 22,000 acres.

Annual Performance Table

Vegetation Management (Acres)

Fiscal Year	Annual	
	Planned	Actual
2001 – 2002	1,467	1,168
2002 – 2003	1,467	1,504
2003 – 2004	1,467	1,537
2004 – 2005	1,467	1,561
2005 – 2006	1,467	3,591
2006 – 2007	1,466	1,481
2007 – 2008	1,466	1,466
2008 – 2009	1,466	1,466
2009 – 2010	1,466	1,466
2010 – 2011	1,466	1,466
Total	**14,665**	**16,706**

15-year Program Graph



**See Challenges to Intended Outcome section explaining why planned and actual acres are the same since 2007-2008*

MEASURE

What is being measured?

Number of acres of vegetation removed and managed.

Target

Equivalent of 22,000 acres removed or maintained by 2016.

Challenges to Intended Outcome

Vegetation management is an annual activity for which the program as a whole manages a total inventory of 4,300 acres and the average annual goal is 3,667 acres. Forty percent of this total, or 1,466 acres is paid for through Outcome 3.1.

Some of this work requires re-visiting the same sites each year, while some activities only need to be performed every three to five years. Due to this fact, the actual acreage performed each year may fluctuate above or below the annual goal, while the program goal remains on target. If the average annual goal fluctuates above or below the target of 3,667 acres, the Program still pays for 1,466 acres to ensure meeting the annual target. This explains the actual numbers matching the planned numbers in recent years.

To meet this target, the District must plan its projects to ensure that the projects meet requirements imposed by the California Environmental Quality Act and other regulatory agencies to obtain environmental clearances and permits.

During the tenth year of the Program, the District was able to fully implement the vegetation management program, and is successfully meeting the Program goals. The overall unit cost for outcome 3.1 was increased by 7.5 percent compared to the previous year. The fluctuation of unit costs from year to year is attributed to a variance in the methods used for vegetation management. The District uses a combination of herbicide applications, hand removal and mechanical mowing to reach the desired outcomes. Each of these activities varies significantly in unit cost. In a given year, the amount of work performed through each activity fluctuates, directly contributing to the variance in the overall unit cost of the program. For example, if a given year requires a higher level of hand removal work, the unit cost will increase. Different activities are used due to a variety of conditions including weather, neighborhood concerns, and endangered species issues. If the herbicide program reduces the need to perform hand removal work, the unit cost decreases. For Fiscal Year 2010-2011, the need for hand removal work increased, contributing to the cost increase. An additional contributor to the cost during the tenth year was an eight percent increase in the re-vegetation acreage.

Trend and Explanation

During the tenth year of the Program, the District performed vegetation management as described in the Program on 3,586 acres; 1,466 acres was funded through the Program. Compared with the average annual goal of 1,466 acres, this represents 100% of the target. The total vegetation management program work included 468 acres of in-stream vegetation control 2,766 acres of access maintenance and fire protection, and 352 acres of re-vegetation maintenance (total of 3,586 acres).

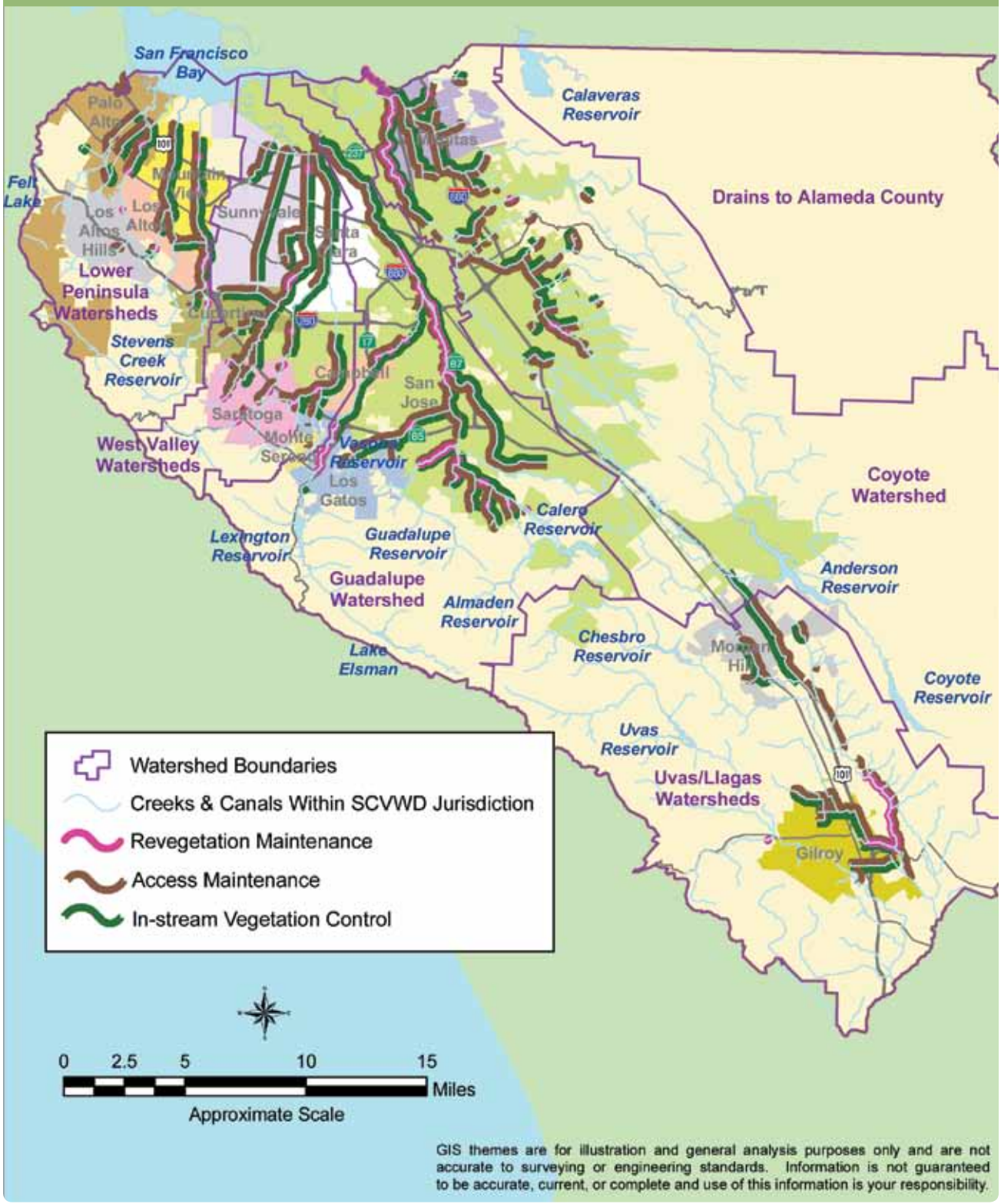
To-date, the District has performed cumulative vegetation management on 16,706 acres relative to a target of 14,665 acres. This work results in 187.3 miles of in stream vegetation control for flood conveyance, 147.5 miles of maintenance access work and 328 acres of re-vegetation maintenance on an annual basis.

Costs associated with this activity have consistently been higher than the corresponding estimated annual allocation in the Program. This is primarily due to the very stringent regulatory requirements applicable to this activity. Examples of such requirements include pre-project biological (wildlife and fisheries) surveys, water quality monitoring, adaptive management activities, and emerging regulations. These requirements were put into effect after the Program was passed by the voters, which in turn resulted in significantly

Unit Cost

Fiscal Year	Actual Exp (Cash Basis)	Annual Actual Acre	Unit Cost
2001-2002	$1,017,267	1,168	$870.95
2002-2003	$1,330,546	1,504	$884.67
2003-2004	$1,655,774	1,537	$1,077.28
2004-2005	$1,628,306	1,561	$1,043.12
2005-2006	$3,112,449	3,591	$866.74
2006-2007	$1,500,357	1,481	$1,013.07
2007-2008	$1,654,690	1,466	$1,128.71
2008-2009	$2,171,329	1,466	$1,481.12
2009-2010	$2,006,662	1,466	$1,368.80
2010-2011	$2,222,876	$1,466	$1,516.28

Clean, Safe Creeks and Natural Flood Protection Program Vegetation Management Work Areas



MEASURE

higher associated compliance costs than originally estimated at the inception of the Program as described below. In March 2011, the Board determined: "After Plan funds are expended or the 22,000 acres are met, vegetation management would continue with other funds," i.e., non-Program funds would supplement the ability to achieve Activity 3.1.

The fluctuation in unit cost is due to the differing cost of the activities covered under Outcome 3.1 and the varying quantities of work completed in each activity. For example, hand labor removal work is three to five times more costly than mechanical work (mowing). While the unit costs for each activity remain relatively stable, the quantities performed in each activity vary depending on the work required. In a year when more hand removal is needed due to limited access for equipment, unit costs will be higher affecting the overall unit cost for the outcome.

Llagas Creek near Badger Pass Road

Photographs were taken looking south at Llagas Creek downstream of Santa Teresa Blvd. near the end of Badger Pass Road. The removal of non-native blackberry bushes possibly alleviated flooding damages to the neighborhood in March 2011, as noted by one resident:

"Once again, on behalf of all my neighbors, I would like to thank you and your organization for cleaning out Llagas Creek when you did . . . If Llagas Creek had not been cleaned out . . . flooding and damage to our homes and property would have been more likely to occur."

Financial Consideration

Estimated annual allocation (inflated) for this activity is $1.7 million. The amount spent in Fiscal Year 2010-2011 was $2.2 million, the additional spending of $566,000 in Fiscal Year 2010-2011 is funded by the future funding allocation of this activity.

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$1,270,000	$1,017,000	$253,000	$253,000
2002 - 2003	$1,308,000	$1,331,000	-$23,000	$230,000
2003 - 2004	$1,348,000	$1,656,000	-$308,000	-$78,000
2004 - 2005	$1,387,000	$1,628,000	-$241,000	-$319,000
2005 - 2006	$2,961,000	$3,112,000	-$151,000	-$470,000
2006 - 2007	$1,472,000	$1,500,000	-$28,000	-$498,000
2007 - 2008	$1,517,000	$1,655,000	-$138,000	-$636,000
2008 - 2009	$1,562,000	$2,171,000	-$609,000	-$1,245,000
2009 - 2010	$1,609,000	$2,007,000	-$398,000	-$1,643,000
2010 - 2011	$1,657,000	$2,223,000	-$566,000	-$2,209,000

ACTIVITY 3.2

Community partnership to identify and implement restoration of fisheries, riparian habitat or wetlands.

Fifteen-Year Goal

Creation of additional wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife. (Equivalent of 100 acres of tidal or riparian habitat created or restored).

How This Activity Will Be Measured

This activity will be measured by tracking the implementation of environmental enhancement (i.e., restoration, rehabilitation, preservation, and creation) acreage, as well as protection for endangered species; removal of fish migration barriers/installation of fish ladders; removal of nonnative, invasive plants; and re-vegetation of native plant species. District compensatory mitigation work is not included as part of environmental restoration for this activity.

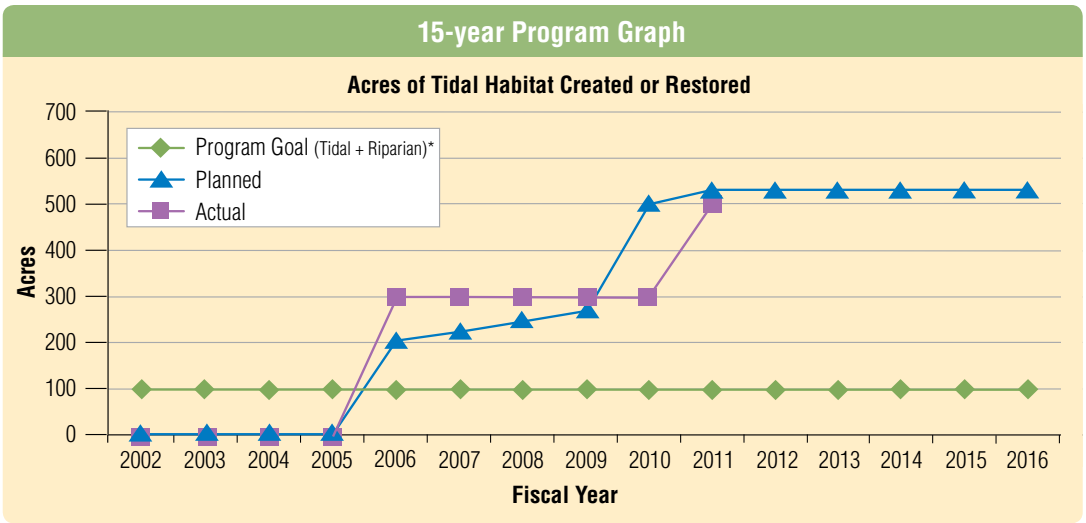
Committee Assessment/Recommendation of this Activity

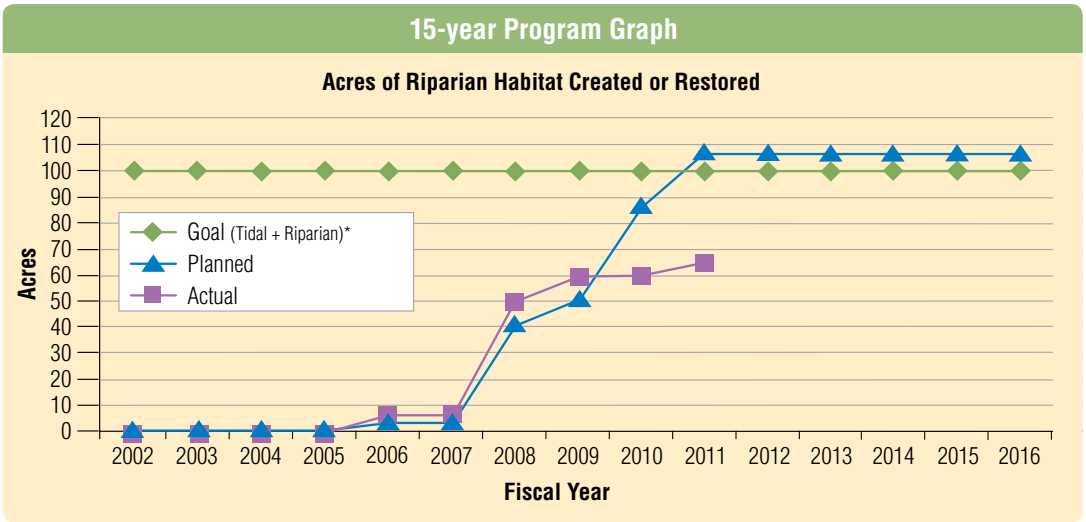
The District has met and exceeded the activity goal approved by the voters. Completion of 10 of 25 Board approved enhancement projects through Fiscal Year 2010-2011 demonstrates substantial progress with 569.67 acres of 629.68 planned enhancements completed to date. This includes completion of 3 projects for 211.48 acres of new enhancements in Fiscal Year 2010-2011.

In addition to progress made in Fiscal Year 2010-2011, the Committee recognizes that the District authorized Program (Activity 3.2) funding for 5 additional enhancement planning projects in Fiscal Year 2009-2010, and 9 additional enhancement implementation projects in Fiscal Year 2010-2011, through Board approval of Environmental Enhancement Grants. See page 63 for the complete list of projects.

Committee Recommendation

The Committee recommends that the District continue to implement previous Board-approved environmental enhancement projects and consider the incorporation of environmental enhancements into capital and water utility projects where feasible. The Committee recognizes that while the District relies on its local, state, and federal partners to complete enhancement projects, partnering municipalities also rely on approved District grant funding to carry out projects. Information on enhancement grants can be found at ***www.valleywater.org/Services/EnvironmentalEnhancements.aspx***.





*Program Goal for Activity 3.2 is to create or restore 100 acres [total] tidal or riparian habitat.

Note(s): 1. See table on Page 63 for completed enhancement projects resulting in progress for the 'Actual' trend lines charted above.

2. Environmental enhancements are included throughout the report and are not limited to Activity 3.2. Please see table in Activity 1.1 (page 27) for additional detail.

MEASURE

What is being measured?

Creation of additional wetlands, riparian habitat, and favorable stream conditions for fisheries and wildlife (Equivalent of 100 acres of tidal or riparian habitat created or restored).

Target

Success criteria is achievement of 100 acres of tidal and/or riparian habitat and completion of one or more activities in: protection for endangered species; removal of fish migration barriers/installation of fish ladders; re-vegetation of native plant species; and removal of nonnative, invasive plants columns as shown on the chart on page 63.

Challenges to Intended Outcome

Challenges include: 1) tracking and monitoring projects to ensure that acreage planned will be successfully implemented; and 2) gaining regulatory and community approval/acceptance.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

Actual performance for Fiscal Year 2010-2011 is 211.48 acres of tidal or riparian habitat created or restored, for a cumulative total of 569.67 acres. Completed projects in Fiscal Year 2010-2011 include: Pond A8 Tidal Wetland Restoration (200 acres), Carnadero Preserve — Tick Creek Riparian Enhancement (2.3 acres), and Guadalupe Creek Cape Ivy Control (9.18 acres). The cumulative total includes 506 tidal acres created or restored and 63.67 riparian acres created or restored.

Through June 2011, the following projects have been completed:*

Tidal Projects (acres)	Riparian Projects (acres)
Island Ponds Tidal Wetland Restoration Project (299 ac)	Lower Silver Creek Flood Protection Project Enhancements (5 ac)
Palo Alto Flood Basin Phragmites Removal Project (7 ac)	Upper Pajaro Watershed Vegetated Buffer Strip Project (2.5 ac)
Pond A8 Tidal Wetland Restoration (200 ac)	Palassou Ridge Wetland Management Project (40 ac)
	Stevens Creek Corridor Restoration Project (Blackberry Farm) Phase 1 (4 ac)
	Adobe Creek Upper Reach 5 Restoration Project (0.69 ac)
	Tick Creek Riparian Enhancements (2.3 ac)
	Guadalupe Creek Cape Ivy Control (9.18 ac)

*Completed means construction finished with monitoring pending.

Trend and Explanation

The trend shows a large increase in the number of projects planned and implemented over time with the implementation of the first cycle of the Environmental Enhancement Program in 2005.

The trend for completion of environmental enhancement implementation projects demonstrates a steady rate of project completion with 10 of 25 funded projects now complete, 1 project cancelled (Guadalupe Creek U Frame Wall Removal), and 14 projects in progress (i.e., on target). The projects in progress are in the planning, design and implementation phases. The cancelled project was determined to be infeasible due to its proximity to mercury-laden sediments and not a priority due to other mercury removal activities being implemented by the District. The project will be removed from the enhancements status chart on page 63 in future years and will no longer be reported.

An additional 5 enhancement planning grant projects were approved by the Board in Fiscal Year 2009-2010. Environmental Enhancement Planning grant projects, while reflecting progress under Activity 3.2, may not directly result in acreage credits for the Program. However it should be noted that of the 5 enhancement planning projects approved in Fiscal Year 2009-2010, 4 were successful in requesting and being awarded enhancement implementation grant funds in Fiscal Year 2010-2011, which will equate to direct results with respect to Outcome 3.2 goals.

Financial Consideration

Estimated annual allocation (inflated) for this activity is $2.7 million. During Fiscal Year 2010-2011, the District spent a total of $226,000. The accumulated reserve for this activity is $14.8 million.

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$2,090,000	$188,000	$1,812,000	$1,902,000
2002 - 2003	$2,153,000	$107,000	$2,046,000	$3,948,000
2003 - 2004	$2,217,000	$1,111,000	$1,106,000	$5,054,000
2004 - 2005	$2,284,000	$1,212,000	$1,072,000	$6,126,000
2005 - 2006	$2,352,000	$3,296,000	-$944,000	$5,182,000
2006 - 2007	$2,423,000	$1,240,000	$1,183,000	$6,365,000
2007 - 2008	$2,496,000	$309,000	$2,187,000	$8,552,000
2008 - 2009	$2,570,000	$1,310,000	$1,261,000	$9,812,000
2009 - 2010	$2,648,000	$158,000	$2,490,000	$12,302,000
2010 - 2011	$2,727,000	$226,000	$2,501,000	$14,803,000

Outcome 3.2: Environmental Enhancements Implementation Projects (Funded in part by Clean, Safe Creeks and Natural Flood Protection Special Tax)

					Program Identified Key Performance Indicator	Additional Performance Objectives				
Project Number	**Organization**	**Project Name**	**Watershed**	**Approved Program Amount**	**100 acres of tidal and/or riparian habitat created or restored (ac/lin ft)**	**Protection for endangered species**	**Removal of fish migration barriers/installation of fish ladders**	**Removal of nonnative, invasive plants**	**Revegetation of native plant species**	**Expected FY Completion**
1	SCVWD	Guadalupe Creek Cape Ivy Control	Guadalupe	$70,138	9.18 ac	N/A	N/A	Removal of 9.18 ac Cape Ivy	N/A	FY2011
2	SCVWD	Island Ponds Tidal Wetland Restoration	Coyote	$420,000	299 ac	Clapper rail, salt marsh harvest mouse, black rail	N/A	Removal of Spartina	Passive revegetation of 299 ac tidal plant species	FY2007
3	SCVWD	Pond A-8 Tidal Wetland Restoration	Guadalupe	$2,100,000	200 ac	N/A	N/A	N/A	Passive revegetation of 200 ac tidal plant species	FY2011
4	SCVWD	Stevens Creek Corridor Restoration Partnership	Lower Peninsula	$401,884	4 ac	Steelhead trout	2 low-flow road crossings and 1 flashboard dam	N/A	N/A	FY2010
5	SCVWD	Palo Alto Flood Basin — *Phragmites australis* Removal	Lower Peninsula	$50,975	7 ac	Clapper rail, salt marsh harvest mouse, Alameda song sparrow	N/A	Removal of 7 ac Common Reed	Reveg with pickleweed, alkali heath and gum plant	FY2009
6	SCVWD	Adobe Creek Upper Reach 5 Restoration	Lower Peninsula	$62,490	0.69 ac	N/A	Removal of 2 large drop structures	N/A	N/A	FY2009
7	SCVWD	Invasive Exotic Vegetation Removal	Guadalupe	$167,000	2 ac	N/A	N/A	Removal of 2 ac weeping willow, acacia, and holly oak	Reveg of 2 acres	FY2011-2013
8	SCVWD	Guadalupe Creek U Frame Wall Removal	Guadalupe	$183,000	0 ac	Steelhead trout	Removal of 1 wall to reduce scour and flow velocities, improving fish migration	N/A	N/A	**Cancelled**
9	SCVWD	Guadalupe River Aquatic Enhancement Program	Guadalupe	$155,683	0.65 ac	Western pond turtles, Steelhead	N/A	N/A	N/A	FY2011-2012
10	SCVWD	Soap Lake Floodplain and Riparian Easement Property Acquisition Program	Uvas Llagas	$250,000	25 ac	least Bell's vireo, CA red-legged frog, California tiger salamander, and possibly San Joaquin kit fox.	N/A	N/A	N/A	FY2010
11	SCVWD	Carnadero Preserve — Tick Creek Riparian Enhancement	Uvas Llagas	$116,000	2.3 ac	N/A	N/A	N/A	Reveg approx. 2000 linear bank feet (2.3 ac)	FY2011
12	SCVWD	Low Flow Channel Modification for Fish Passage Improvement (Silva Crossing at Miller Avenue)	Uvas Llagas	$37,413	Enhancement to 7 mi of upstream fish habitat	Steelhead trout	Replace 2 culverts with 1 that is appropriately designed to remediate section where fish must jump	N/A	N/A	FY2011 revised construction date.
13	SCVWD	Lower Uvas Creek Fish Passage at Bolsa Road Ladder	Uvas Llagas	$33,000	Enhancement to 7 mi of upstream fish habitat	N/A	Retrofit 1 fish ladder and improve 1 bridge culvert weir system for fish passage	N/A	N/A	FY2011 revised construction date. Additional funding needed.
14	SCVWD	Upper Pajaro Watershed Vegetated Buffer Strip Project	Uvas Llagas	$240,000	2.5 ac	N/A	N/A	N/A	Reveg 2.5 ac in buffer strips with native perennial grasses	FY2008
15	SCVWD	Palassou Ridge Wetland Management Project	Coyote	$969,218	40 ac	CA red legged frog, tiger salamander, foothill yellow legged frog	N/A	N/A	N/A	FY2008
16	SCVWD	Lower Silver Creek Flood Protection Project Enhancements	Coyote	$4,000,000	5 ac	N/A	N/A	N/A	Planting of 5 acres SRA and riparian habitat	FY2006

Complete | On Target | FY 2011 Approved Projects (On Target)

Outcome 3.2: Environmental Enhancements Implementation Projects (Funded in part by Clean, Safe Creeks and Natural Flood Protection Special Tax)

					Program Identified Key Performance Indicator	Additional Performance Objectives				
Project Number	**Organization**	**Project Name**	**Watershed**	**Approved Program Amount**	**100 acres of tidal and/or riparian habitat created or restored (ac/lin ft)**	**Protection for endangered species**	**Removal of fish migration barriers/installation of fish ladders**	**Removal of nonnative, invasive plants**	**Revegetation of native plant species**	**Expected FY Completion**
17	City of Cupertino	Stevens Creek Corridor Park and Restoration, Phase 2	Lower Peninsula	$565,000	2.33 ac + 2040	N/A	7 log habitat structures	Remove arundo	Plant riparian forest and oak woodlands	FY2016
18	West Valley College	Vasona Creek Native Vegetation Enhancement Project	West Valley	$180,000	5.7 ac	N/A	N/A	Remove non-native vegetation	Plant native trees, shrubs, grass and sedge species	FY2016
19	Acterra	Adobe Creek Restoration Redwood Grove to Shoup Park	Lower Peninsula	$46,365	0.9 ac	N/A	N/A	Remove non-native vegetation	Plant watershed specific native plants	FY2016
20	West Valley College	Tennis Court Wetland Enhancement Project	West Valley	$109,000	0.5 ac	Create seasonal ponds for CRLF breeding	N/A		Plant native wetland plants	FY2016
21	City of Santa Clara	City of Santa Clara - Ulistac Natural Area Environmental Enhancement	Guadalupe	$106,978	4.95 ac	N/A	N/A	Remove non-native vegetation	Plant native species	FY2016
22	SCVWD	Invasive Spartina Monitoring & Control in South Bay Marshes & Creeks	Various	$75,000	5 ac	N/A	N/A	Remove invasive Atlantic smooth cord grass (Spartina)	N/A	FY2016
23	SF Bay Bird Observatory	Vegetation Management in SBSP's Alviso Unit	Guadalupe	$259,787	13 ac	N/A	N/A	Remove non-native plants	Revegetate with native plants	FY2016
24	Trout Unlimited	Little Arthur Creek Streamflow Stewardship Implementation Project	Uvas Llagas	$220,500	8,858 if	Increase streamflow to benefit Steelhead	N/A	N/A	N/A	FY2016
25	West Valley College	Vasona Creek Enhancement Project: Channel Stabilization	West Valley	$200,000	400 if	N/A	Stabilize creek channel	N/A	Protects existing mature oak trees	FY2016
Totals				**$11,019,431.38**	**569.67 of 629.70 ac**					

Complete On Target FY 2011 Approved Projects (On Target)

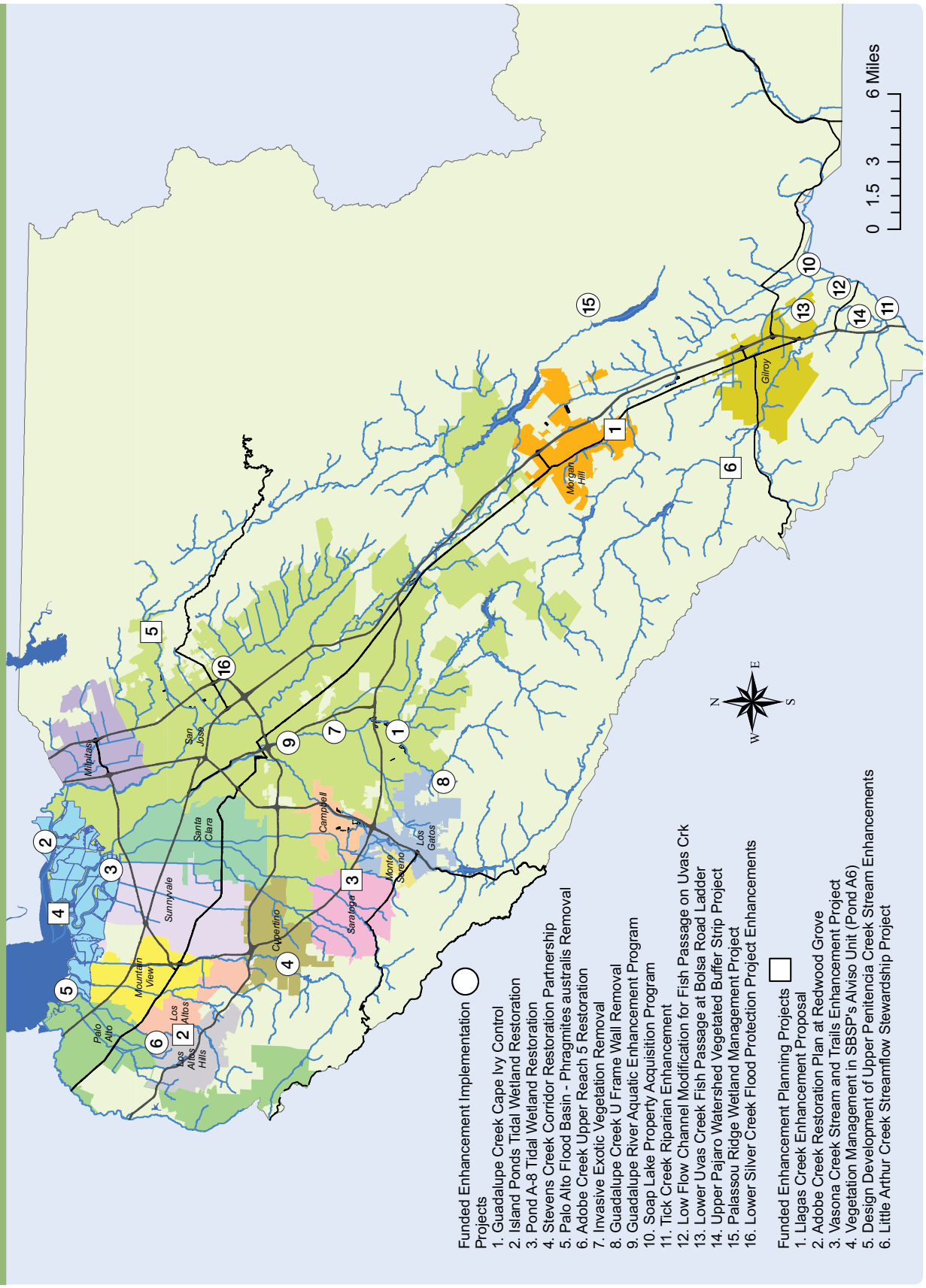
Outcome 3.2: Environmental Enhancement Planning Grant Projects (as of June 30, 2011) (Funded in part by Clean, Safe Creeks and Natural Flood Protection Special Tax)

							Additional Performance Objectives			
Project Number	**Watershed**	**Project Name**	**Approved Program Amount**	**Partnering Agency**	**Planned tidal and/or riparian habitat (ac/lin ft)***	**Program credit for tidal and/or riparian habitat created or restored (ac/lin ft)**	**Protection for endangered species**	**Removal of fish migration barriers/installation of fish ladders**	**Removal of nonnative, invasive plants**	**Revegetation of native plant species**
1	Uvas Llagas	Llagas Creek Enhancement Program	$72,202	City of Morgan Hill	3000 lin ft (15 ac)	N/A	N/A	N/A	X	X
2	Lower Peninsula	Adobe Creek Restoration Plan at Redwood Grove	$45,571	Acterra	1000 lin ft	N/A	N/A	N/A	X	X
3	West Valley	Vasona Creek Stream and Trails Enhancement Project	$50,000	West Valley College	500 lin ft (2 ac)	N/A	N/A	N/A	X	X
4	Guadalupe	Vegetation Management in SBSP's Alviso Unit (Pond A6)	$21,905	San Francisco Bay Wildlife Society	40 ac	N/A	N/A	N/A	N/A	X
5	Coyote	Design Development of Upper Penitencia Creek Stream Enhancements	$50,000	City of San José	0.11 ac	N/A	X	X	X	X
6	Uvas Llagas	Little Arthur Creek Streamflow Stewardship Project	$24,523	Trout Unlimited	8858 lin ft	N/A	X	N/A	N/A	N/A
Totals			**$264,201.00**							

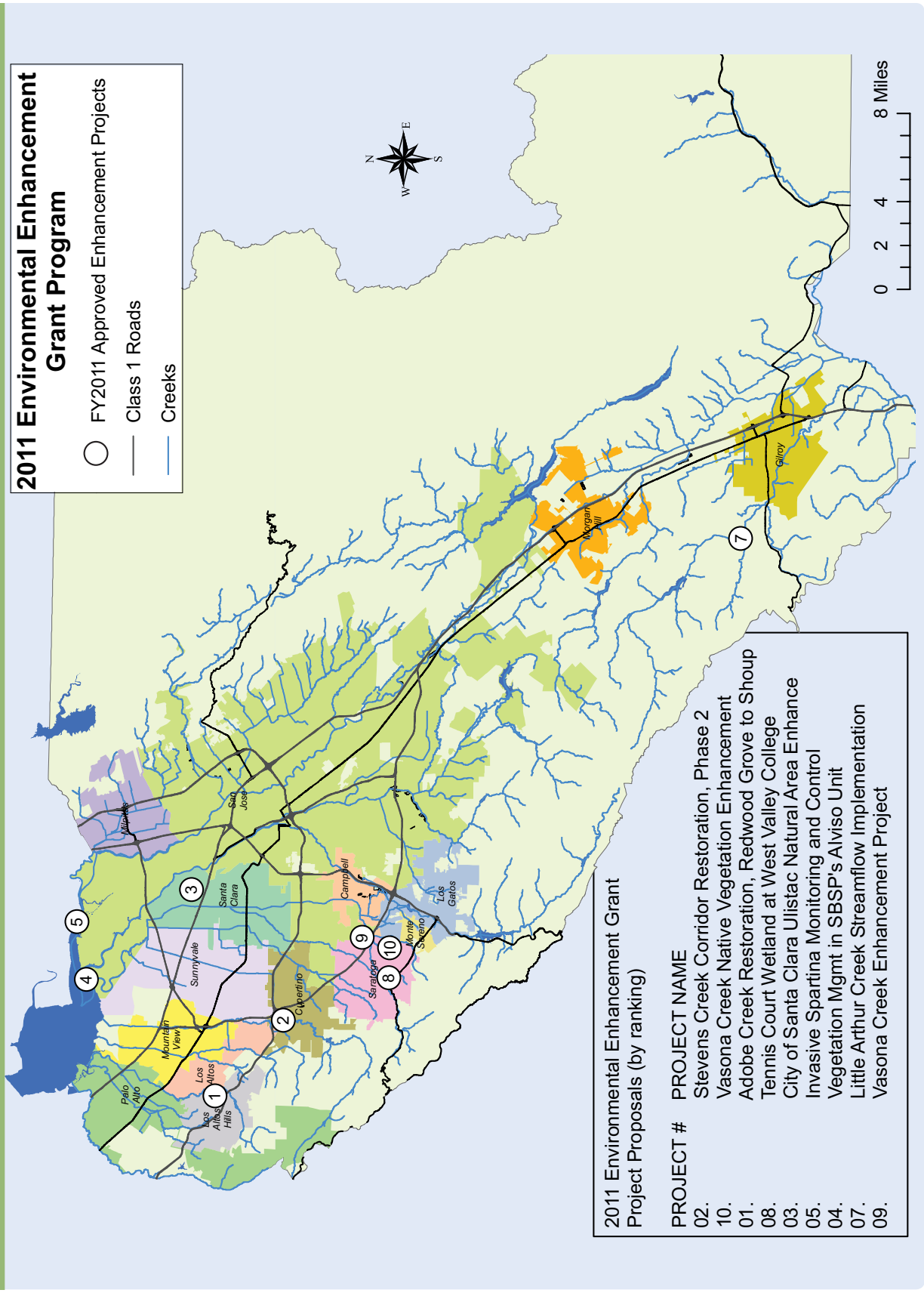
Complete On Target

*No direct Outcome 3.2 credit since these are planning projects.

Environmental Enhancement Program (Funded in part by the Clean, Safe Creeks & Natural Flood Protection special tax)



Environmental Enhancement Program (Funded in part by the Clean, Safe Creeks & Natural Flood Protection special tax)



Outcome 4

There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate

Outcome 4 of the Clean, Safe Creeks and Natural Flood Protection Program (Program) recognizes the District's unique position in being able to provide public access and recreational opportunities along riparian corridors, some of the few remaining natural areas in highly urbanized Santa Clara County. Through the development of access for some 70 miles of additional trails and open space, Outcome 4 seeks to increase public recreational opportunities and allow the public to enjoy waterways throughout Santa Clara County, while meeting the District's Board's Ends Policy E-4.3.1., which states "Support additional trails, parks and open space along creeks and in the watersheds when reasonable and appropriate."

The District is working with agencies that have developed existing trails, parks and open space plans and websites, such as the Santa Clara County's Countywide Trails Master Plan (***www.sccgov.org/portal/site/parks***) and City of San José's Greenprint (***www.sjparks.org/Trails/trailsindex.asp***) to focus partnership efforts and target collaborative projects.

Outcome 4 objectives complement the District's efforts to facilitate development of joint-use and joint-trail agreements on District land with partners, e.g. local municipalities, County of Santa Clara, and others, and to incorporate trails into its capital projects wherever possible.

Specifically, Outcome 4 addresses the following four objectives:

- Partnerships to provide public access to 70 miles of open space and/or trails along creeks.
- Increase in community recreational opportunities.
- Increased number of bicycle paths for alternative transportation.
- Opportunities for open space, trails and parks incorporated into flood protection projects.

Submitted by Outcome 4 Subcommittee: Jim Foran (Chair), Marc Berman, Nancy Hobbs, Terry Trumbull, Pat Waite

ACTIVITY 4.1

Provide additional trails and open space along creeks and in watersheds.

Fifteen-Year Goal

Community partnership to identify and provide public access to 70 miles of open space or trails along creeks.

How This Activity Will Be Measured

The miles of trails and acres of open space and parks created or planned for as a result of the Program will be measured. Both the actual miles of new trails constructed and the miles of additional access provided by construction will be reported. This activity will also be measured by the total number of agreements entered into as a result of the Program. The District will describe the dollars expended to achieve the results of the program and specify where District land or right of way is provided.

Committee Assessment/Recommendation of this Activity

New public access to 65.5 miles of trail and open space over the first ten years of the program demonstrates the Activity 4.1 goal of creating new public access to 70 miles of trails and new open space is achievable within the fifteen-year Program timeframe. Zero trail miles were added in Fiscal Year 2010-2011. Public access to trails is made available through the development of joint trail and joint use agreements, as well as implementation of the Trail and Open Space Grant Program. To date, four cycles of the grant program have been carried out and 27 projects have been funded.

In addition to progress made in Fiscal Year 2010-2011, the Committee recognizes that the District authorized Program (Activity 4) funding for 5 additional trail and open space projects in Fiscal Year 2009-2010, and 6 additional trail and open space projects in Fiscal Year 2010-2011, through Board approval of Trail and Open Space Grants.

Committee Recommendation

The Committee encourages the Board to identify partners and further opportunities for trail development and to extend the remaining Fiscal Year 2010-2011 unallocated trail and mapping grant funds for an additional round of grants, no later than Fiscal Year 2012-2013. As part of development, the Committee supports the District funding trail planning projects and finds this to be a suitable expenditure of Outcome 4 funds. Information on trail grants can be found at ***www.valleywater.org/Services/TrailsandOpenSpace.aspx.***

The Committee recognizes the District's efforts to engage partners for development of countywide trail maps. Should the District find willing partners for this work, the Committee finds this to be a suitable expenditure of Program Outcome 4 funds since it will demonstrate the District providing public access. Maps currently being produced include:

Maps currently being produced include:

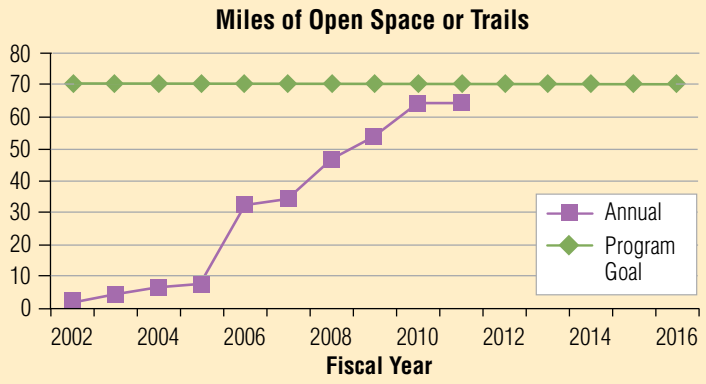
- County trail maps (see Planning and Development/Countywide Trails Master Plan/Countywide Trails Master Plan Map at ***www.parkhere.org/portal/site/parks***);
- City of San José trail maps (see ***www.sjparks.org/Trails/TrailsMaps.asp***); and
- District thumbnail trail maps for Clean, Safe Creeks trail projects completed prior to 2009-2010 (see ***www.valleywater.org/Services/TrailsAndOpenSpace.aspx***).

Annual Performance Table

Miles of Trails (Actual Constructed)

Fiscal Year	Actual	Cumulative
2001 – 2002	1.20	1.20
2002 – 2003	1.13	2.33
2003 – 2004	2.98	5.31
2004 – 2005	2.36	7.67
2005 – 2006	23.80	31.47
2006 – 2007	2.50	33.97
2007 – 2008	13.26	47.23
2008 – 2009	7.00	54.23
2009 – 2010	11.27	65.50
2010 – 2011	0	65.50

15-year Program Graph



MEASURE

What is being measured?

Miles of additional trails or open space provided along creeks and in watersheds.

Target

70 miles of additional open space or trails along creeks by 2016.

Challenges to Intended Outcome

- Complex process of working with multiple agencies, obtaining permits and managing various schedules.
- Limited community partner resources for dedicated work on trail projects may require extended time periods for completion of trail agreement requirements.
- Placement of trails along creeks and in the watersheds must consider ecological values in their development.
- Public concern about trail alignments may prove inconsistent with trail objectives.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

Current Performance

The District added 0 (actual constructed) miles of public access to trails in Fiscal Year 2010-2011; for a cumulative total of 65.5 miles of trail to date. These 65.5 miles represent 94% completion of the District's trail and open space goal of providing public access to 70 miles of trail and open space by the year 2016. Projects approved for District grant funding in Fiscal Year 2010 and 2011 are in progress and will be reported for the Program's credit in the near future.

Trend and Explanation

Cumulative Trail Progress demonstrates miles of trail open to the public and credited to the Program by affiliation with a Joint Trail Agreement, Joint Use Agreement, or Trail Grant Agreement. Total Miles to Be Built demonstrates all projects, including those planned and built, as they exist in various phases of development (identified, planning, design, construction and open to the public). To complete the Outcome 4 goal, Total Miles to Be Built should equal at least 70 miles and Cumulative Trail Progress should reach 70 miles by Fiscal Year 2016.

STATUS – CURRENT REPORTING PERIOD: FISCAL YEAR 2010-2011

To support the Outcome 4 goal of 70 miles of trail and open space, the District Board approved additional Trail and Open Space Grant cycles in Fiscal Year 2009-2010 and Fiscal Year 2010-2011. For these two grant cycles, funding for 11 projects consisting of 6.54 miles of new trail was approved by the Board (see map on page 75).

Three additional trail planning projects were also approved in Fiscal Year 2010-2011 under the Watershed Stewardship Grant Programs, Trail Planning category; these include (organization and project name):

1. **City of Saratoga** — Village Creek Trail Planning
2. **VIVA** (Valley Inititative for Values in Urban Agriculture and Horticulture Foundation) — Saratoga Creek Trail on SCVWD Walnut Avenue Land
3. **West Valley College** — Vasona Creek in West Valley College, Creek Trail Plan

Trail Development	Fiscal Year 2010-2011 Annual Trail Progress (miles constructed)	Cumulative Trail Progress (miles constructed)	Total Miles to be Built
Joint Trail Agreements	0	20.26	29.54
Joint Use Agreements	0	9.06	10.25
Trail Grant Agreements – 2003 cycle	0	32.98	32.98
Trail Grant Agreements – 2005 cycle	0	3.20	3.2
Trail Grant Agreements – 2010 cycle	0	0	4.99
Trail Grant Agreements – 2011 cycle	0	0	1.55
Total	**0**	**65.50**	**82.47**

Financial Consideration

Estimated annual allocation (inflated) for this activity is $1.2 million. During Fiscal Year 2010-2011, the District spent a total of $72,000. The accumulated reserve for this activity is $7.4 million, of which $670,725 is allocated to previously approved trail and open space projects and the remaining funds are set aside in the Program reserves.

Fiscal Year	Annual Allocation (inflated)	Actual Expenditure	Estimated Annual Reserves	Cumulative Reserves
2001 - 2002	$920,000	$25,000	$895,000	$895,000
2002 - 2003	$948,000	$119,000	$828,000	$1,723,000
2003 - 2004	$976,000	$118,000	$858,000	$2,581,000
2004 - 2005	$1,005,000	$241,000	$765,000	$3,346,000
2005 - 2006	$1,035,000	$323,000	$712,000	$4,058,000
2006 - 2007	$1,067,000	$984,000	$83,000	$4,141,000
2007 - 2008	$1,099,000	$790,000	$309,000	$4,450,000
2008 - 2009	$1,131,000	$62,000	$1,070,000	$5,519,000
2009 - 2010	$1,165,000	$382,000	$783,000	$6,302,000
2010 - 2011	$1,200,000	$72,000	$1,128,000	$7,430,000

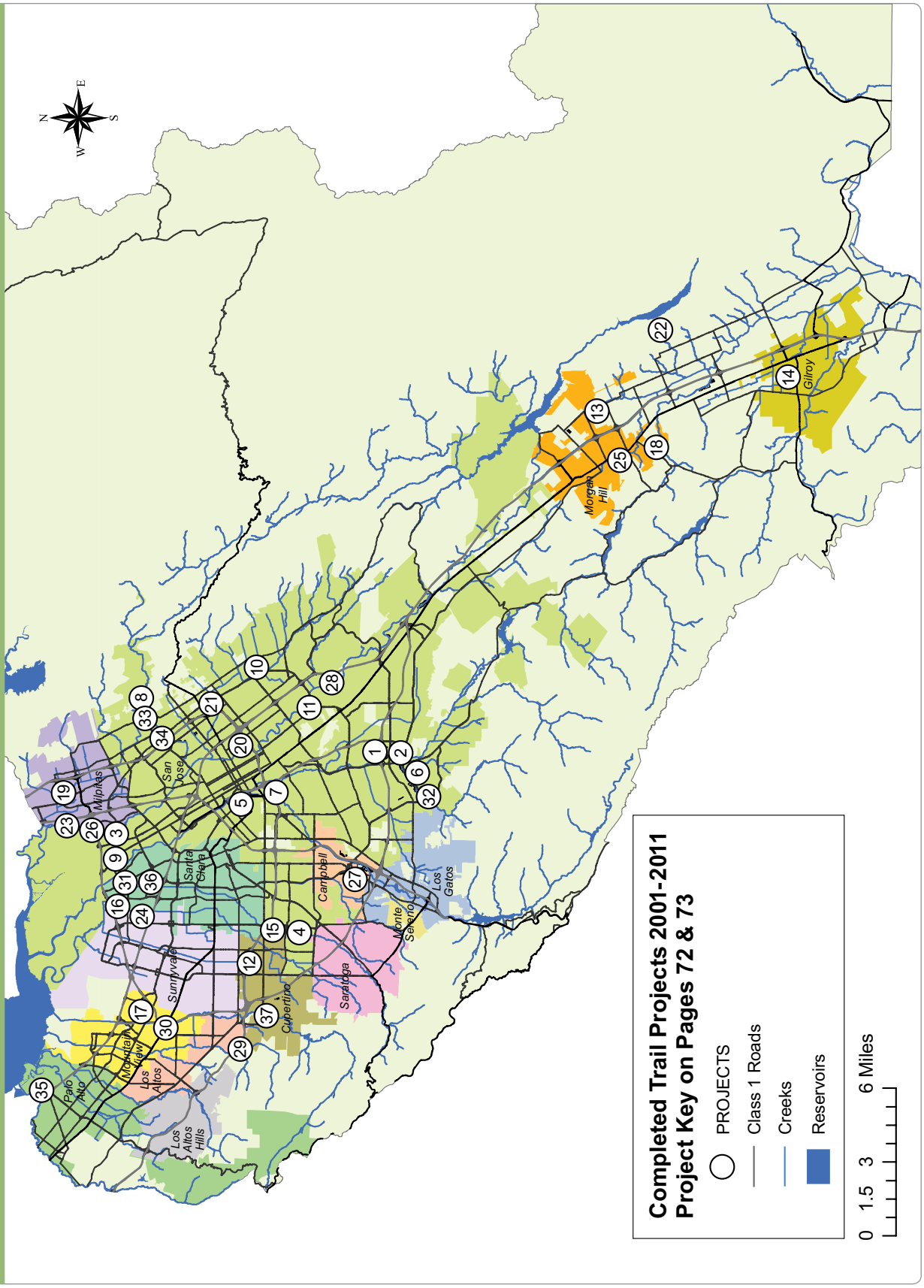
Outcome 4: Trails and Open Space Completed Projects

Map No.	Project	Partnering Agency	Watershed	Clean, Safe Creeks Grant Funding	Total Project Funding	FY Completed	Trails Proposed (Miles)	Trails Completed (Miles)	Open Space Access (Acres)	Trail Surface: Paved or Unpaved
	TYPE: Joint Trail Agreements									
1	**Guadalupe 12** (Blossom Hill to Chenowyth)	San Jose	Guadalupe			03-04	0.8	0.8		Paved
2	**Guadalupe 13** (Coleman to Almaden Lake)	San Jose	Guadalupe			03-04	0.19	0.19		Paved
3	**Coyote Creek Trail** (HWY 237 to Montague Expwy)	San Jose	Coyote			04-05	2.36	2.36		Unpaved
4	**Saratoga Creek** (San Jose) (Bollinger Rd to English Dr)	San Jose	West Valley			05-06	1.1	1.1		Paved
5	**Guadalupe River Trail** – Downtown Interim (880 to 280)	San Jose	Guadalupe			05-06	2.7	2.7		Paved
6	**Guadalupe Creek Trail** – Interim (Almaden to Meridian)	San Jose	Guadalupe			06-07	0.8	0.8		Unpaved
7	**Los Gatos Reach 4** (Lonus Street to Auzerais Ave)	San Jose	Guadalupe			07-08	0.5	0.5		Paved
8	**Penitencia Creek Trail** – Reach 2a (Noble to Percolation Pond #2)	San Jose	Coyote			07-08	0.62	0.62		Unpaved
9	**Guadalupe River Trail** – Lower Interim (Gold St to 880)	San Jose	Guadalupe			07-08	6.6	6.6		Unpaved
10	**Thompson Creek/Lower Silver Creek** (Tully to Aborn)	San Jose	Coyote			07-08	1.77	1.77		Unpaved
32	**Guadalupe Creek Trail** – Interim (Meridian to Singletree)	San Jose	Guadalupe			09-10	0.9	0.9		Unpaved
33	**Penitencia Creek Trail** – Reach 3-5 (Piedmont Road to Jackson Ave)	San Jose	Guadalupe			09-10	1.58	1.58		Paved
34	**Penitencia Creek Trail** – Reach 6c (Maybury to King)	San Jose	Guadalupe			09-10	0.34	0.34		Unpaved
						SUBTOTAL	**20.26**	**20.26**		
	TYPE: Joint Use Agreements									
11	**Coyote Creek** – Reach 4B (Idlewood to Capital Expwy)	San Jose	Coyote			01-02	1.2	1.2		Paved
12	**Regnart Creek** (at De Palma Lane)	Cupertino	West Valley			02-03	0.04	0.04		Paved
13	**San Pedro Ponds** (in and around ponds)	Morgan Hill	Uvas-Llagas			02-03	1.09	1.09		Unpaved
14	**Uvas Creek** (Santa Teresa to Christmas Hill Park)	Gilroy	Uvas-Llagas			03-04	0.33	0.33		Paved
15	**Saratoga Creek** (Mitty Way to Bollinger)	Cupertino	West Valley			03-04	0.47	0.47		Paved
16	**Calabazas Creek** (237 to Mission College Blvd)	Santa Clara	West Valley			03-04	1.19	1.19		Paved
17	**Stevens Creek** (Shoreline to Sleeper)	Mountain View	Lower Pen			08-09	3.68	3.68		Paved
18	**West Little Llagas** (La Crosse Dr to Watsonville Rd)	Morgan Hill	Uvas-Llagas			08-09	0.72	0.72		Paved
35	**San Francisquito Creek** (HWY 101 to Palo Alto Baylands)	Palo Alto	Lower Pen			09-10	0.34	0.34		
						SUBTOTAL	**9.06**	**9.06**		

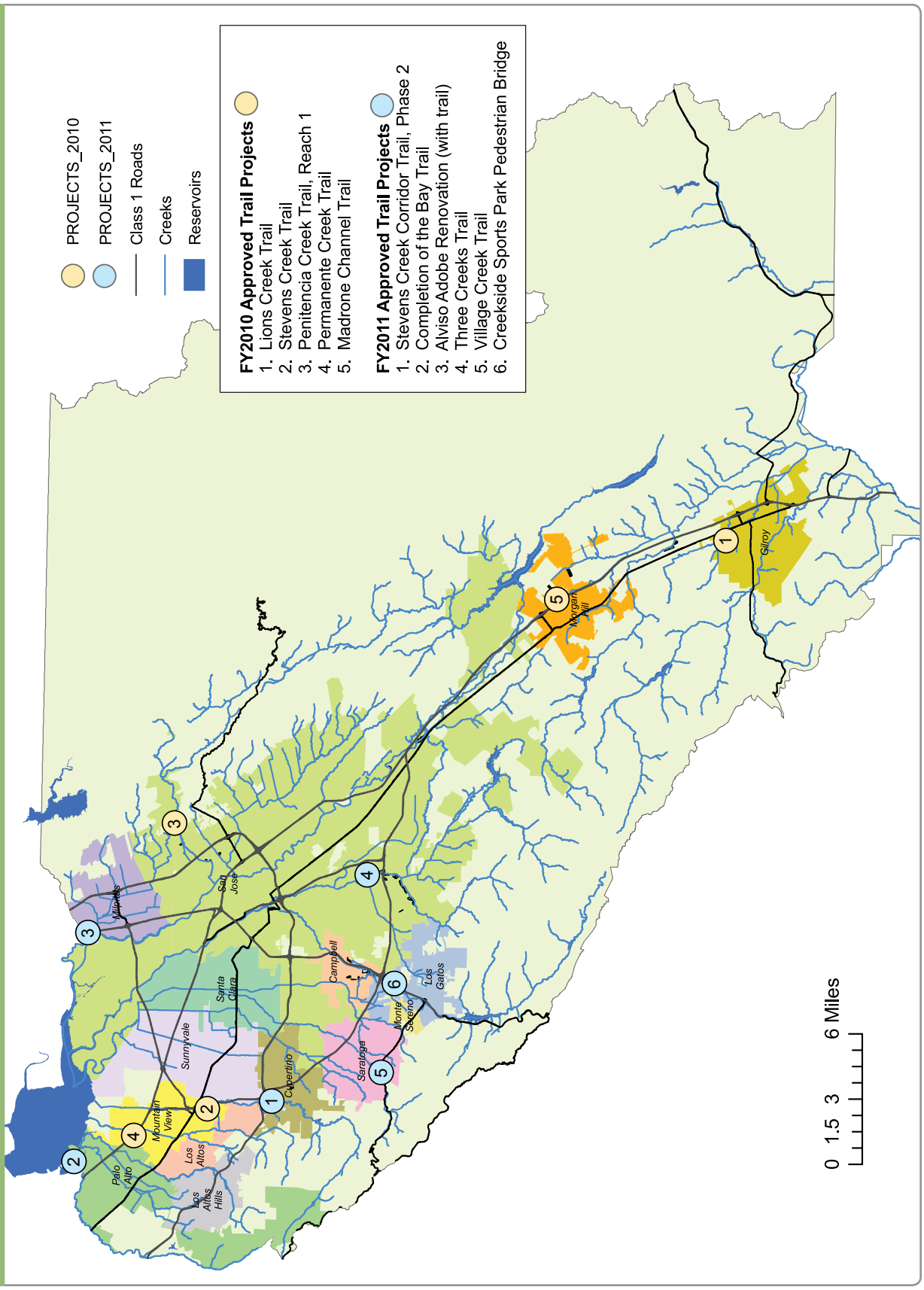
Outcome 4: Trails and Open Space Completed Projects

Map No.	Project	Partnering Agency	Watershed	Clean, Safe Creeks Grant Funding	Total Project Funding	FY Completed	Trails Proposed (Miles)	Trails Completed (Miles)	Open Space Access (Acres)	Trail Surface: Paved or Unpaved
	TYPE: Clean, Safe Creeks Trail Grant Agreements									
19	**Berryessa Creek Trail**, Reach 3 (Complete from Abel Street to Town Center-Hillview)	Milpitas	Coyote	$90,000	$1,005,000	04-05	1.5	1.5		Paved
20	**Selma Olinder/Coyote Creek Trail** (Coyote Creek at East Williams Street)	San Jose	Coyote	$250,000	$2,870,665	05-06	0.5	0.5	13	Paved
21	**Dobern Bridge/Lower Silver Creek Trail** (Dobern Ave to Bambi Lane)	San Jose	Coyote	$250,000	$657,096	05-06	0.25	0.25		Paved
22	**Coyote Lake** — Harvey Bear Ranch County Park Phase 1 Trails Master Plan Implementation (approx. E San Martin Ave to Roop Road)	County	Coyote	$200,000	$620,000	05-06	16	16		Unpaved
23	**Coyote Creek Trail**, Reach 1 Staging Area (Complete from Dixon Landing Road to Ranch Drive)	Milpitas	Coyote	$89,400	$1,120,800	05-06	1.75	1.75		Paved
24	**Calabazas Creek Trail** (Mission College to Old Mtn View Road)	Sunnyvale	West Valley	$200,000	$950,670	06-07	1.5	1.5		Paved
25	**Morgan Hill Wildlife Trail** (Edmundson Ave to Edes Court)	Morgan Hill	Uvas Llagas	$100,000	$289,448	06-07	0.2	0.2		Paved
26	**Coyote Creek Trail**, Reach 1 Staging Area (additional mileage added to Dixon to Ranch alignment)	Milpitas	Coyote	$0	$0	07-08	0.45	0.45		Paved
27	**Enhancement of the South Page Ponds** Groundwater Recharge Facility (Hacienda at Winchester)	Campbell	Guadalupe	$300,000	$556,837	07-08	0.32	0.32		Paved
28	**Coyote Creek Trail County Park** — Hellyer Gap Trail Improvement Project (Highway 101 at Hellyer Avenue, near Coyote Creek)	County	Coyote	$245,000	$495,000	07-08	0.5	0.5		Unpaved
29	**Stevens Creek Trail** — Habitat Protection and Historic Preservation of De Anza Knoll (in Rancho San Antonio County Park near Christo Rey Dr)	County	Lower Pen	$35,400	$262,959	07-08	2	2	130	Paved
30	**Stevens Creek Trail** — Reach 4, Segment 2 North (Yuba Dr to El Camino Real)	Mountain View	Lower Pen	$264,000	$5,533,382	07-08	0.5	0.5		Paved
31	**San Tomas Aquino Creek Trail**, Reach 1 & 2 (237 to Agnew) (Agnew to Scott)	Santa Clara	West Valley	$162,500	$4,229,090	08-09	2.6	2.6		Paved
36	**San Tomas Aquino Creek Trail**, Reach 3-5 (Scott to Bollinger)	Santa Clara	West Valley	$120,000	$7,320,000	09-10	7.36	7.36		Paved
37	**Stevens Creek Crridor Trail** — Phase 1 (Stevens Creek Blvd to McClellan Road)	Cupertino	Lower Pen	$300,000	$1,200,000	09-10	0.75	0.75		Unpaved
			SUBTOTAL	**$2,186,300**	**$27,110,947**		**36.18**	**36.18**	**143**	
			GRAND TOTAL (FY2001 - 2011)				**65.5**	**65.5**	**143**	

The Clean, Safe Creeks and Natural Flood Protection Program Trail Projects



Trail and Open Space Projects Approved for Fiscal Year 2010 and Fiscal Year 2011



Appendix

- Summary of Key Performance Indicators for the 15-year Program as presented to the voters in 2000 A2
- Financial Summaries A4
- Chart of Program Total Expected Revenue by Outcome A6
- Capital Projects and Support Costs A6
- Glossary A8

Summary of Key Performance Indicators (15-year Program)

General Outcomes and Activities	Key Performance Indicators
1. Homes, schools, businesses and transportation networks are protected from flooding.	
• Provide flood damage reduction by increasing the stream's ability to convey the 100-year flow.	
Permanente Creek *(SF Bay to El Camino Real)*	Flood damage reduction for 1,664 parcels that include: 1,378 homes, 160 businesses and 4 schools/institutions.
San Francisquito Creek *(SF Bay to Searsville Dam)*	Planning study and design of an engineering plan to provide flood damage reduction for 3,000 parcels.
Sunnyvale West Channel *(Guadalupe Slough to Hwy 101)*	Flood damage reduction for 11 parcels by increasing the creek's ability to convey the 100-year storm flow.
Calabazas Creek *(Miller Avenue to Wardell Rd)*	Flood damage reduction for 2,483 parcels that include: 2,270 homes, 90 businesses, and 7 schools/institutions.
Sunnyvale East Channel *(Guadalupe Slough to I-280)*	Flood damage reduction for 1,618 parcels that include: 1,450 homes, 95 businesses, and 4 schools/institutions.
Upper Guadalupe River *(I-280 to Blossom Hill Rd.)*	Using only **local funding**, a reduced project would extend from Hwy 280 to Curtner Avenue. Frequency of flooding would be reduced, however parcels in the flood plain would still be subjected to flooding from upstream sources. **Local and federal funding** for flood damage reduction for 6,989 parcels that include: 6,280 homes, 320 businesses, and 10 schools/institutions.
Berryessa Creek *(Lower Penitencia Creek to Old Piedmont Rd.)*	Using only **local funds**, a reduced project would extend from the confluence with Lower Penitencia upstream to Montague Expressway, modifying 3 miles of channel and protecting approximately 100 parcels. **Local and federal funding** for flood damage reduction for 1,814 parcels including 1,420 homes, 170 businesses, and 5 schools/institutions.
Coyote Creek *(Montague Expway to 280)*	Planning study, design, and partial construction (to the extent allowed by available funding) of an engineering plan to provide flood damage reduction.
Upper Llagas Creek *(Buena Vista Ave. to Wright Ave. and W. Little Llagas)*	**Local funding only** would include 3.25 miles of channel construction, including a 1-mile diversion. This would provide protection from a 10-year flood event for some agricultural land, leaving areas of Morgan Hill exposed to flooding. **Local and federal funding** for flood damage reduction combined would include: 1,397 parcels comprised of 820 homes, 200 businesses, 190 agricultural parcels, and 6 schools/institutions.
• Sediment removal to preserve flood protection capacity of creeks.	Remove approximately 120,000 cubic yards of sediment from unimproved creeks.
• Maintenance of newly improved creeks	Preserve flood protection capacity for 46 miles of newly improved creeks maintained (vegetation control and sediment removal).

Summary of Key Performance Indicators (15-year Program)

General Outcomes and Activities	Key Performance Indicators
2. There is clean, safe water in our creeks and bays.	
• Continue to reduce pollutants from urban runoff as a co-permittee with other local agencies and expand the program to Uvas/Llagas Watersheds.	Reduce urban runoff pollutants in South County cities.
• Hazardous materials management and incident response including reservoirs for Uvas/Llagas Watersheds.	Provide hazardous material response for Uvas/Llagas Watersheds. Respond to incidents within 2 hours of initial report. (Equivalent of approximately 180 incident responses).
• Impaired water bodies improvement	Reduce or prevent additional impairment of water.
• Neighborhood creeks frequently inspected and cleaned of litter and graffiti.	60 creek cleanup events. Response time to remove litter and graffiti of less than 5 working days. Additional safety fence around creeks is installed or repaired as needed.
• Partnership with the county on general surface water quality protection program/outreach.	Assist County or other cities in reduction of pollutants in surface water.
3. Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Board.	
• Vegetation management to protect healthy creek and bay ecosystems, and preserve existing floodwater conveyance capacity in creeks.	Creeks that are clear of plant growth that can impede water flow and reduce the flood protection capacity. Vegetation at mitigation sites properly monitored and managed to assure healthy habitat. (Equivalent of 22,000 acres removed and maintained).
• Community partnership to identify and implement restoration of fisheries, riparian habitat or wetlands.	Creation of additional wetlands, riparian habitat and favorable stream conditions for fisheries and wildlife. (Equivalent of 100 acres of tidal or riparian habitat created or restored).
4. There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate.	
• Provide additional trails and open space along creeks and in watersheds.	Community partnership to identify and provide public access to 70 miles of open space or trails along creeks.

Financial Summary Fiscal Year 2010-2011 ($ Thousands)

Revenue	Budget	Actual	% Received
Special Tax	$33,803	$33,965	100%
Interest [6]	2,525	1,902	75%
Other [1]	4,671	4,311	92%
Total	**$40,999**	**$40,177**	**98%**

Expenditures	Estimated Annual Allocation (Inflated)	Actual			% of Allocation Spent or Reserved
		Spent[2]	Allocated to Reserves[3]	Spent + Reserved	
Outcome 1					
Activity 1.1 Capital Projects (Local/State portion only)	23,850	21,460	2,390	23,850	100%
Program Management & Support [4]	759	805	(45)	759	106%
Activity 1.2 Sediment Removal [7]	391	290	101	391	100%
Activity 1.3 Maintenance of newly improved creeks	496	—	496	496	100%
Subtotal	25,497	22,556	2,941	25,497	100%
Outcome 2					
Activity 2.1 District Urban Runoff Pollution Prevention[7]	52	50	2	52	100%
Activity 2.2 Hazardous Materials Mgmt & Incident Response[7]	39	30	9	39	100%
Activity 2.3 Impaired Water Bodies Improvement[7]	1,383	1904	479	1,383	100%
Activity 2.4 Good Neighbor Maintenance[7]	1,305	910	395	1,305	100%
Activity 2.5 Pollution Prevention Partnership w/County[7]	509	502	7	509	100%
Subtotal	3,288	2,396	892	3,288	100%
Outcome 3					
Activity 3.1 Vegetation Management[7]	1,657	2,223	(566)	1,657	134%
Activity 3.2 Environmental Restoration	2,727	226	2,501	2,727	100%
Subtotal	4,384	2,449	1,935	4,384	100%
Outcome 4					
Activity 4.1 Open Space and Trails	1,200	72	1,128	1,200	100%
All Outcome Subtotal	34,369	27,473	6,896	34,369	100%
Program Management & Support [4]	134	212	(78)	134	158%
Unallocated Resources [5]	6,496	—	5,674	5,674	87%
Total	**$40,999**	**$27,684**	**$12,493**	**$40,177**	**98%**

1 Actual includes reimbursement from DWR for Upper Guadalupe & Upper Llagas $3.4m & $0.6m respectively
2 Spent includes actual expenditures only; encumbrances are included with Reserves
3 Negative amounts in the Allocated to Reserves column represent withdrawals or decreases to reserves for that particular activity
4 Program Management & Support: portion under Outcome 1 is directly attributable to capital project support while remaining supports operations and program-wide costs.
5 Unallocated Resources is the amount of additional revenues received each year over the Estimated Annual Allocation (adjusted for inflation); this amount is available in reserves to allocate toward future operating maintenance activities and/or capital projects
6 Actual Interest excludes year-end fair market value adjustments that are required by GASB for financial statement reporting purposes only
7 Reserves for these activities increased by $427,237, which includes an increase of $576,417 in encumbrance offset by a reduction of $149,180 in reserves for Other Program Operating Activities

Cumulative Financial Summary—FY 2001/02-2010/11 ($ Thousands)

Revenue	Budget	Actual	% Received
Special Tax	$289,868	$293,117	101%
Interest[8]	16,631	20,984	126%
Other[1]	11,636	13,290	114%
Total	**$318,135**	**$327,391**	**103%**

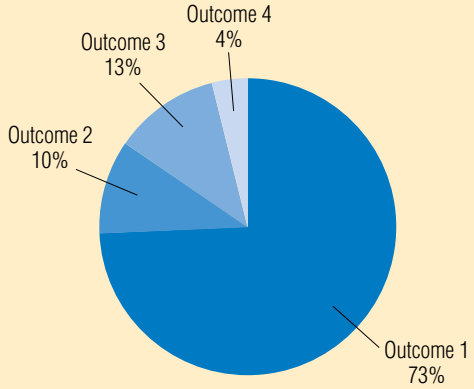
Expenditures/Appropriations	Sum of Estimated Annual Allocation (Inflated)	Actual			% of Allocation Spent or Reserved
		Spent[2]	Allocated to Reserves[3]	Spent + Reserved	
Outcome 1					
Activity 1.1 Capital Projects (Local/State portion only)	209,548	106,826	102,723	209,548	100%
Program Management & Support[4]	10,582	11,295	(714)	10,582	107%
Activity 1.2 Sediment Removal[9]	4,159	3,865	294	4,159	100%
Activity 1.3 Maintenance of newly improved creeks	4,356	—	4,356	4,356	100%
Subtotal	228,645	121,986	106,659	228,645	100%
Outcome 2					
Activity 2.1 District Urban Runoff Pollution Prevention[9]	459	382	76	459	100%
Activity 2.2 Hazardous Materials Mgmt & Incident Response[9]	344	332	12	344	100%
Activity 2.3 Impaired Water Bodies Improvement[9]	12,152	8,298	3,853	12,152	100%
Activity 2.4 Good Neighbor Maintenance[9]	11,977	9,991	1,986	11,977	100%
Activity 2.5 Pollution Prevention Partnership w/County[9]	4,471	3,367	1,104	4,471	100%
Subtotal	29,402	22,370	7,032	29,402	100%
Outcome 3					
Activity 3.1 Vegetation Management[9]	16,091	18,300	(2,209)	16,091	114%
Activity 3.2 Environmental Restoration[6]	23,960	9,157	14,803	23,960	100%
Subtotal	40,051	27,457	12,594	40,051	100%
Outcome 4					
Activity 4.1 Open Space and Trails[7]	10,547	3,116	7,431	10,547	100%
All Outcome Subtotal	308,645	174,929	133,716	309,645	100%
Program Management & Support[4]	2,984	2,010	974	2,984	100%
Unallocated Resources[5]	6,507	—	15,762	15,762	242%
Total	**$318,135**	**$176,939**	**$150,453**	**$327,391**	**103%**

[1] Actual includes $13.3 million reimbursement from the State/Local Government; majority of the amount is for Upper Guadalupe and Upper Llagas projects. $1.7 million reimbursement for Mercury cleanup effort.
[2] Spent includes actual expenditures only; encumbrances are included with Reserves
[3] Negative numbers in the Allocated to Reserves column represent withdrawals or decreases to reserves for that particular activity
[4] Program Management & Support: portion under Outcome 1 is directly attributable to capital project support while remaining supports operations and program-wide costs. Accumulative Budget & actual were adjusted to reconcile with Chart 2 in Appendix
[5] Unallocated Resources is the cumulative amount of additional revenues received each year over the Estimated Annual Allocation; this amount is available in reserves to allocate toward future operating maintenance activities and/or capital projects
[6] Reserves for Environmental Restoration include $143,665 for encumbrance obligations; the balance is available for future grants
[7] Reserves for Open Space and Trails include $670,725 for encumbrance obligations; the balance is available for future grants
[8] Actual excludes year-end fair market value adjustments that are required by GASB for financial statement reporting purposes only
[9] Reserves for these activities include $4,057,853 for Other Program Operating Activities and $1,059,426 for encumbrance obligations, for a total of $5,117,278

Clean, Safe Creeks and Natural Flood Protection Program Total Expected Revenue by Program Outcome

Category	Expected Revenue
Outcome 1 – Natural Flood Protection	$337,456,000
Outcome 2 – Clean, Safe Water	$ 46,869,000
Outcome 3 – Healthy Ecosystems	$ 62,492,000
Outcome 4 – Trails, Parks, and Open Space	$ 17,111,000
15-year Program Total	**$463,928,000**

15-Year Program Graph



Note: The capital projects under Natural Flood Protection include only District costs, and exclude participation from other agencies.

Capital Project and Support Costs

Outcome 1 includes capital project and support costs for implementation of the nine capital improvement projects identified in the Clean, Safe Creeks and Natural Flood Protection Program (Program) measure. The initial fifteen-year estimate of the projected funding available from the special parcel tax for these capital improvements was $325 million for direct project costs. An additional $17.5 million (or 5.1% of total capital project costs) is currently estimated for capital support.

Capital ***project*** costs include planning, design, land acquisition, and construction costs that are directly attributable to the capital improvements.

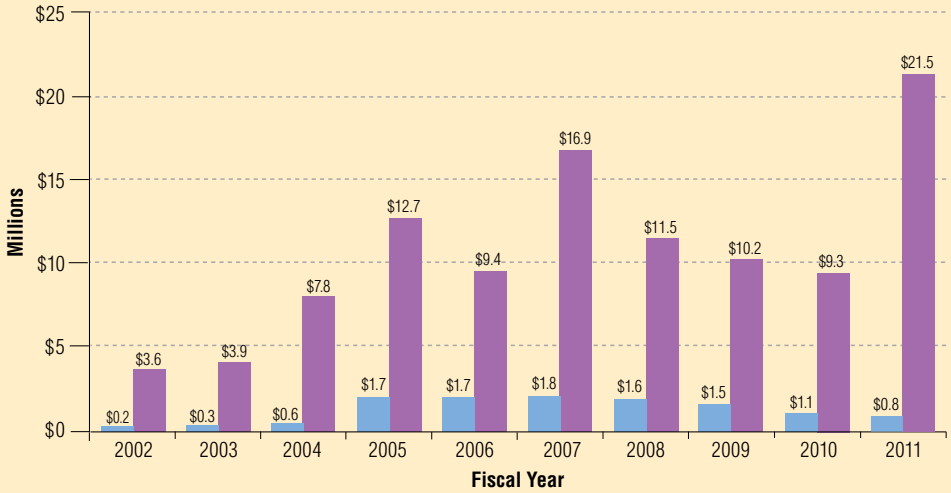
Capital ***support*** costs include activities that are necessary to implement the District's Capital Improvement Program (CIP). These activities are critical support to successful implementation of the CIP and include the following:

1. Ongoing CIP planning and analysis for prioritization, scheduling, and funding changes.
2. Maintaining a quality management system to ensure CIP policies and procedures are followed and process improvement opportunities are identified and implemented.
3. Developing and maintaining tools and curriculums (such as Geomorphic Fieldwork Guide, Bank Protection/ Erosion Repair Design Guide, and Cost Estimation Guide) to ensure that the District's capital projects delivery are current within engineering and technical advances, and changing laws, rules and regulations.
4. Day to day administrative and management functions.
5. Training and development of staff.

Capital support costs are allocated each year to the various District funds including the Program fund based on the estimated staff hours directly charged to capital projects.

Chart 1 illustrates the capital project and support costs expended during the first ten years of the Program from FY2001-2002 through FY2010-2011. The increase in support costs during this period reflects a ramping up of staffing to begin the planning and design for implementation of these improvements, while funds accumulate annually on a pay-as-you-go basis to fund the major construction costs in the latter half of the fifteen-year Program.

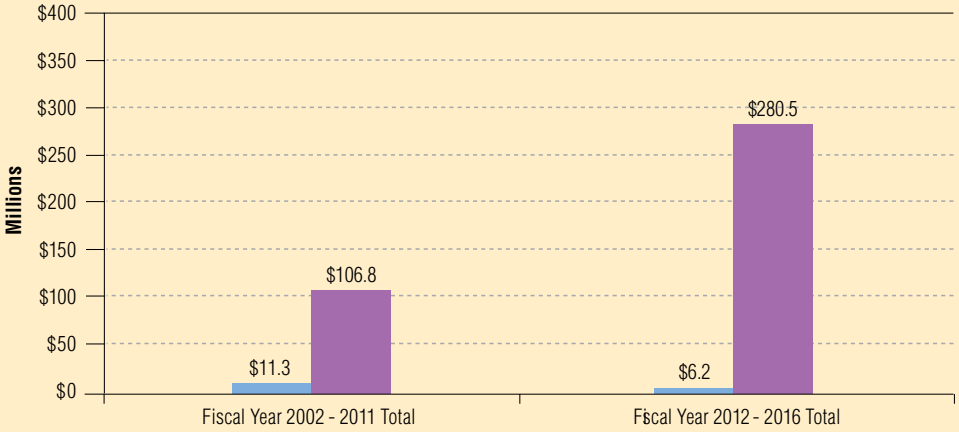
Chart 1 Program Capital Support vs Project Costs — Fiscal Year 2002 - Fiscal Year 2011 Actuals*



Support costs for the first three years were low because the program was starting up and most of the capital support was allocated to major non-CSC funded projects that were underway.

*Fiscal Year 2011 costs not finalized pending close of the fiscal year.

Chart 2 Program Capital Support vs Project Costs — First Ten Years' Actuals* vs Next Five Years' Planned



The ratio of support costs to project costs for the first ten-year period is 9.6% while the second five-year period is projected to be 2.2%.

*Fiscal Year 2011 costs not finalized pending close of the fiscal year.

Chart 2 shows the cumulative total for the actual capital project and support costs expended during the first ten year period, compared to the projected costs for the next five year period. The ratio of capital support to capital project costs for the initial ten year period is 9.6%.

The next five year period reflects a significant increase in planned capital project costs as the projects move into the construction phase. The ratio of capital support to capital project costs for that period is projected to be 2.2% and assumes the same capital program staffing levels as today. Taken cumulatively, for the fifteen-year period, the ratio is projected at 4.3%, which is within the benchmark estimate of 7.4% provided in December of 2005.

It should be noted that these charts only reflect the Program funding for Outcome 1 capital improvements and do not include other potential construction funding (i.e. Army Corps of Engineers) that are dependent on federal appropriations. These charts will be updated annually to monitor and report out what changes are impacting these ratios and what steps the District will be taking to address them, if appropriate.

Glossary

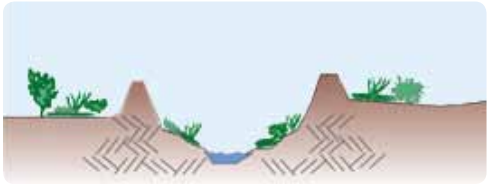
Average Annual Expenditure

The estimated amount of annual, fiscal year funding available to be allocated to each outcome activity based on the original Clean, Safe Creeks and Natural Flood Protection Program's target, inflated by 3% per year.

CEQA

California Environmental Quality Act.

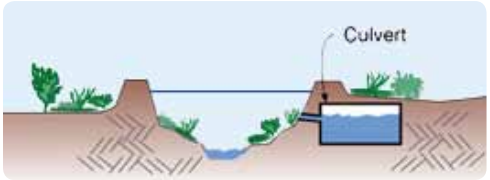
Channel



Co-permittee

The thirteen cities within Santa Clara County, except for Morgan Hill and Gilroy, the County of Santa Clara, and the Santa Clara Valley Water District, totaling 15 agencies included in the National Pollutant Discharge Elimination System (NPDES) Phase I permit. All of these agencies are part of this permit. Morgan Hill and Gilroy are in Phase II.

Culvert



Encumbrance

Commitment for future expenditure of funds based on unfilled purchase orders, unperformed contracts, etc. Funds are reserved or set aside at year end in the Reserve for Encumbrances to ensure payment of the District's liabilities.

Environmental Enhancement:

Action taken by the District that benefits the environment, is NOT mitigation, and is undertaken voluntarily. Enhancement actions may include environmental restoration, rehabilitation, preservation or creation. In instances where enhancements are located in the same vicinity as a mitigation project, actions must exceed required compliance to compensate for environmental impacts to be considered environmental enhancements.

Floodwall

Glossary

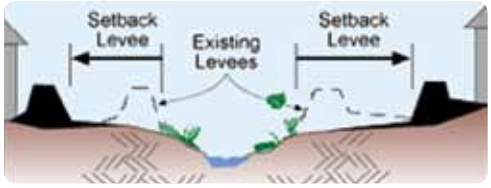
Historical Ecology Study

Examination of maps, aerial photographs, and other historical documents to determine the historical location and condition of creeks and rivers and their ecology.

ISO (International Organization for Standardization)

The world's largest developer of standards. Although ISO's principal activity is the development of technical standards, ISO standards also have important economic and social repercussions. ISO standards make a positive difference, not just to engineers and manufacturers for whom they solve basic problems in production and distribution, but to society as a whole.

Levee/Setback Levee



National Economic Development Plan

Federal policy requires the U.S. Army Corps of Engineers (Corps) evaluate a range of alternatives to determine which alternative maximizes the economic benefits of public investment in a project. The cost effectiveness of public investment is measured by comparing average annual economic benefits and costs. The alternative with the greatest net benefits is defined as the plan which maximizes National Economic Development (NED). The NED plan is usually recommended by the Corps for construction.

Problem Definition Report

A report that describes findings and problems identified after initial investigations and evaluation of existing conditions in the project area. The findings are used to refine the project objectives.

SCVURPPP (Santa Clara Valley Urban Runoff Pollution Prevention Program)

A program formed by the 15 Co-permittees to comply with the NPDES regulations.

Santa Clara County Green Business Program

This program is a partnership between government, business, and the public in support of continuous environmental improvement. This voluntary program encourages business to take proactive actions that are good for both their bottom-line and the environment.

State Water Resources Control Board

The State Water Resources Control Board (State Water Board) was created by the Legislature in 1967. The mission of the State Water Board is to ensure the highest reasonable quality for waters of the State, while allocating those waters to achieve the optimum balance of beneficial uses.

Subvention

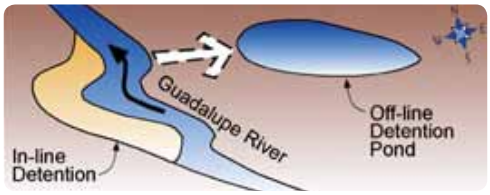
Subventions are reimbursements for rights of way and relocation costs of channel improvements and levee projects provided to flood control agencies by the Department of Water Resources Flood Subventions Program. See additional information at ***www.fcpsubventions.water.ca.gov/overview/overview_index.cfm***.

Glossary

Total Maximum Daily Load (TMDL)

A Total Maximum Daily Load, or TMDL, is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. Under section 303(d) of the Clean Water Act, states, territories, and authorized tribes are required to develop lists of impaired waters. These are waters that are too polluted or otherwise degraded to meet the water quality standards set by states, territories, or authorized tribes. The law requires that these jurisdictions establish priority rankings for waters on the lists and develop TMDLs for these waters.

Upstream and Offstream Storage



Report Contact List

Outcome 1— Homes, schools, businesses and transportation networks are protected from flooding		
Activity 1.1	Melanie Richardson	(mrichardson@valleywater.org)
Activity 1.2	Carol Fredrickson	(cfredrickson@valleywater.org)
Activity 1.3	Ann Draper	(adraper@valleywater.org)
Outcome 2 — There is clean, safe water in our creeks and bays		
Activity 2.1	Shree Dharasker	(sdharasker@valleywater.org)
Activity 2.2	Larry Lopez	(llopez@valleywater.org)
Activity 2.3	Shree Dharasker	(sdharasker@valleywater.org)
Activity 2.4	Carol Fredrickson	(cfredrickson@valleywater.org)
Activity 2.5	Shree Dharasker	(sdharasker@valleywater.org)
Outcome 3 — Healthy creek and bay ecosystems are protected, enhanced or restored as determined appropriate by the Board		
Activity 3.1	Mark Wander	(mwander@valleywater.org)
Activity 3.2	Shree Dharasker	(sdharasker@valleywater.org)
Outcome 4 — There are additional open spaces, trails and parks along creeks and in the watersheds when reasonable and appropriate		
Activity 4.1	Shree Dharasker	(sdharasker@valleywater.org)
Financial Information	Najon Chu	(nchu@valleywater.org)

All Santa Clara Valley Water District report contacts can be reached at: **(408) 265-2600.**

Clean, Safe Creeks and Natural Flood Protection Program Independent Oversight Committee

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